

**NEWS CANON EOS 7D**  
18MP APS-C SENSOR



**NEWS SONY ALPHA 850**  
24MP FULL-FRAME DSLR

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Saturday 12 September 2009

# amateur Photographer

## Panasonic GF1

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nature in the  
late summer



**EXPERT ADVICE**

**AP explains...**  
The best kit for macro







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**Photographer**

March 21st 2009 issue

Manfrotto 190 Series picks up another award



**Manfrotto**  
proven professional



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**Amateur Photographer** For everyone who loves photography

## Shifting sands



**Damien Demolder**  
Editor

When you're the underdog, you work extra hard. New guys have to make more of an effort to get noticed,

and the start-up business in a mature market needs burning hunger and drive to succeed. Without strength and determination you fail to make a mark, but with the right attitude a rising star can eclipse the leading lights of yesterday.

In our industry there are a lot of established names, but there are dangerous new boys, too. To the establishment those new boys probably felt like not much more than an irritation at first. We are, though, going through a stage of movement, of shifting plates in the photographic world, and in the tremor new mountains will be formed, and old landmarks may be lost. Sony and Panasonic in particular are making the earth shake, with new technologies, and multiple bodies and lenses to support their missions. Whether they can do enough to pull back the leads of Nikon and Canon remains to be seen. What's clear is that the landscape is changing and, as far as I can see, it's all for the better.

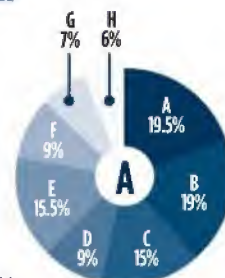
## Our question of the week

**In AP 29 August we asked...**

What's the most you would pay for a fixed focal length lens?

**You answered...**

- A Up to £250 19.5%
- B Up to £400 19%
- C Up to £600 15%
- D Up to £800 9%
- E Up to £1,000 15.5%
- F Up to £2,000 9%
- G Up to £4,000 7%
- H More than £4,000 6%



**This week we ask...**

Do you think the likes of Sony and Panasonic can topple Canon or Nikon from the top of the charts within the next three years?

A Yes B No C Don't know

**Vote online**  
[www.amateurphotographer.co.uk](http://www.amateurphotographer.co.uk)

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Find out how three AP readers captured colourful candids in Scotland

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To have your pictures published in Gallery, send in a selection of up to ten images. They can be either a selection of different images or all have the same theme. Digital files sent on CD should be saved in a Photoshop-compatible format, such as JPEG or TIFF, with a contact sheet and submission form. Visit [www.amateurphotographer.co.uk/apgallery](http://www.amateurphotographer.co.uk/apgallery) for details. We cannot publish images without the necessary technical details. Each RGB image should be a minimum of 2480 pixels along its longest length. Transparencies and prints are also accepted. We recommend that transparencies are sent without glass mounts and posted via Special Delivery. For transparencies, prints or discs to be returned you must include an SAE with sufficient postage.

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### Our address and other contact details

Amateur Photographer,  
IPC Media, Blue Fin Building,  
110 Southwark Street, London SE1 0SU

**AP Editorial** Telephone: 0203 148 4138  
Fax 0203 148 8130  
Email [amateurphotographer@ipcmedia.com](mailto:amateurphotographer@ipcmedia.com)  
**AP Advertising** Telephone: 0203 148 2517  
Email [lee\\_morris@ipcmedia.com](mailto:lee_morris@ipcmedia.com)  
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News | Analysis | Comment | PhotoDiary 12/9/09

# News

**The full-frame Alpha 850 is expected to cost nearly £500 less than the one-year-old Alpha 900**

New Sony DSLR, page 6



Semi-pro digital SLR out next month | New 18MP sensor and new AF

## Canon reveals EOS 7D digital SLR

**C**ANON has announced the EOS 7D, a mid-range digital SLR featuring a new 18-million-pixel CMOS imaging sensor (APS-C size) and eight frames per second shooting.

The Live View-equipped 7D will cost £1,699.99 and is due to arrive in October.

Features include a Full HD movie (1920x1080-pixel) option and equivalent ISO sensitivity expandable to ISO 12,800.

Dual Digic 4 processors are designed to enable 'more advanced algorithms' to be used to achieve 8fps at the full 18MP resolution.

Canon adds that the new camera's magnesium-alloy body boasts dust and moisture resistance on a par with the EOS-1N 35mm film camera.

The company says it has 'completely redesigned' the autofocus system to include a separate processor to handle AF calculations.

'This, along with AI Servo II AF, enables the EOS 7D to offer accurate, reliable and continuous shooting at 8fps,' claimed a spokesman,



adding that all 19 AF points are of the 'cross-type' kind.

The new imaging sensor features 'condensed circuitry', yet with 'improved sensitivity', according to Canon, which claims to have increased the capacity of the photodiodes and used 'gapless microlenses' that have been moved closer to them.

The 3in LCD screen has a resolution of 920,000 dots and a claimed viewing angle of 160°.

Also on board is spot AF, a new mode that uses a smaller area of the sensor to determine focus, says

the firm. 'This is useful for small objects where there is background detail that can distract the AF sensor,' explained a spokesperson.

The 7D also includes zone AF, allowing photographers to ensure their subject is 'automatically' selected, by limiting automatic AF selection to 'one of five zones'.

The user can customise autofocus settings. Different AF points can be set for vertical or horizontal orientation, for example, allowing photographers to 'switch between landscape and portrait shots without

touching a button'.

The camera also houses a new metering system that includes Focus Colour Luminance – technology designed to measure focus, colour and luminance across 63 zones.

The 'dual layer' metering sensor aims to tackle overexposure caused by it being more sensitive to red subjects. 'The dual-layer sensor has one layer sensitive to red and green light, and one that is sensitive to blue and green light,' explained the firm. 'The metering algorithm then compares the level of the two layers and adjusts the meter reading accordingly.'

The camera's viewfinder features a new 'Transmissive LCD' that can be illuminated on demand in low light to show the grid, spot metering and AF points superimposed.

Meanwhile, a Dual-Axis Electronic Level, displayed in the viewfinder and on the LCD monitor, should ensure level horizons when capturing landscape shots.

Canon has also announced three new lenses, details of which will appear next week.

## Sigma SD15 launch date unclear

SIGMA is gearing up to launch its latest digital SLR, the SD15, but it is still unclear when it will be released onto the market.

The SD15 will house the same 14-million-pixel Foveon X3 imaging sensor that is employed in Sigma's current SD14 model.

It will incorporate a new True II image processing engine and 3in LCD monitor.

The camera had been due for launch this summer following a modification to the processor.

However, when asked when we can expect it in the shops a Sigma Imaging UK

spokesman said he was not yet aware of the launch date. We understand that the camera's manual is yet to be printed.

Sigma confirmed the upcoming launch of the camera at last year's photokina trade show in Germany when a spokesman said: 'Photographers expressed a desire to incorporate the True image processing engine – which

is used in the DP1 – into a digital SLR camera.'

'In order to meet this demand, the SD15 – with high-resolution direct image sensor – has been designed around the new True II image-processing engine.'

'This combination delivers superior image quality as well as improved processing speed, operation and performance.'

**SNAP SHOT**

### Handbook discount

The 2010 edition of *The Freelance Photographer's Market Handbook* goes on sale on 1 October. Packed with nearly 1,000 listings of potential markets for the freelance or aspiring freelance photographer, the book details the types of pictures required and fees paid. AP readers can claim a £3 discount. To order the book at the discounted price of £13.95 (inc £2 p&p) call 0208 882 3315 or send a cheque to BFP Books, Focus House, 497 Green Lanes, London N13 4BP.

### Moore energy

Jessops says its new chief executive Trevor Moore, 40, brings retail experience from previous jobs at Select Property, Thresher Group, Whitbread and HSBC. He is also a former operations director at Coffee Republic. 'He is a highly energetic and experienced retailer, so he will take us to the next stage,' said chairman David Adams.

### Clarification

Edinburgh Photographic Society wants to make clear that its website address is [www.edinburghphotographicsociety.co.uk](http://www.edinburghphotographicsociety.co.uk) and not [www.edinburghcamerclub.co.uk](http://www.edinburghcamerclub.co.uk). The society says it has no connection with 'Edinburgh Camera Club'. AP is happy to clarify this, following recent entries in the 'PhotoDiary' section of the magazine, which stemmed from information listed by the Royal Photographic Society.



# PhotoDiary

A week of photographic opportunity

WEDNESDAY

9 SEPTEMBER

**EXHIBITION** Dying to Know by 17 award-winning photographers, last day, at P3, London NW1 5LS. Visit [www.dyingtoknow.org.uk](http://www.dyingtoknow.org.uk).

**DON'T MISS** 60 Year Anniversary Flower Festival: Celebrating Arlington (Tlarm-5pm), until 13 September at Arlington Court, Devon EX31 4LP. Tel: 01271 850 296. Visit [www.nationaltrust.org.uk](http://www.nationaltrust.org.uk).

THURSDAY

10 SEPTEMBER

**DON'T MISS** Chasing the Light roadshow by David Noton, at the Olympus Theatre, Filton College WISE Campus, Bristol BS34 8LP. Tickets £15. Tel: 01963 250 061. Visit [www.davidnoton.com](http://www.davidnoton.com).

**EXHIBITION** Present, Past, Future by Richard Heeps, until 20 September at The Photographers Lounge, Dorset BH19 2NX. Tel: 01929 424 414. Visit [www.photographerslounge.co.uk](http://www.photographerslounge.co.uk)

FRIDAY

11 SEPTEMBER

**EXHIBITION** Pastoral Visions by Graham Ovenden, until 18 October at Dimbola Lodge, Isle of Wight PO40 9QE. Tel: 01983 756 814. Visit [www.dimbola.co.uk](http://www.dimbola.co.uk). **EXHIBITION** The Forgotten Caves and Coves of the Causeway Coast by Andy McInroy (whose work was featured in AP last year), until 3 October at Riverside Theatre, University of Ulster, Coleraine. Tel: 0287 032 3232. Visit [www.andymciney.com](http://www.andymciney.com).

SATURDAY

12 SEPTEMBER

**DON'T MISS** One-day b&w darkroom printing course (includes tuition in b&w film processing), at Photocats, London E9. Costs £75. Tel: 0208 986 9283. Email [peteryoung83@yahoo.co.uk](mailto:peteryoung83@yahoo.co.uk). **DON'T MISS** Mayor's Thames Festival, until 13 September. *Amateur Photographer* and *What Digital Camera* have teamed up with Olympus to offer free drop-in masterclasses on taking photographs of London and the river. Visit [www.thamesfestival.org](http://www.thamesfestival.org). **DON'T MISS** Last Night of the Proms, includes Proms in the Park concert in Hyde Park, London. Visit [www.bbc.co.uk/proms](http://www.bbc.co.uk/proms).

SUNDAY

13 SEPTEMBER

**EXHIBITION** Polaroids: Mapplethorpe, until 13 September at Modern Art Oxford, OX1 1BP. Tel: 01865 722 733. Visit [www.modernartoxford.org.uk](http://www.modernartoxford.org.uk).

MONDAY

14 SEPTEMBER

**EXHIBITION** A Shadow Falls by Nick Brandt, until 3 October at Atlas Gallery, London W1U 7NF. Tel: 0207 224 4192. Visit [www.atlasgallery.com](http://www.atlasgallery.com). **EXHIBITION** by Photospace members, until 19 September at TSI Gallery, Middlesbrough TS1 2AZ. Visit [www.thephotospace.co.uk](http://www.thephotospace.co.uk). **EXHIBITION** I Want It All, includes images of James Dean and Twiggy, until 10 October at The Little Black Gallery, London SW10 0AJ. Tel: 0207 349 9332. Visit [www.thelittleblackgallery.com](http://www.thelittleblackgallery.com).



TUESDAY

15 SEPTEMBER

**EXHIBITION** Living with the Wall: Berlin 1961-1989, until 21 March 2010 at Imperial War Museum North, Manchester M17 1TZ. Tel: 0161 836 4000. Visit [www.iwm.org.uk](http://www.iwm.org.uk). **EXHIBITION** When You're a Boy, until 4 October at The Photographers' Gallery, London W1F 7LW. Tel: 0845 262 1618. Visit [www.photonet.org.uk](http://www.photonet.org.uk).

## News



## Sony Alpha 850 cuts cost of full-frame

**S**ONY will next month launch its second full-frame digital SLR, the Alpha 850, which is expected to cost nearly £500 less than the Alpha 900 launched last year.

AP understands that the Alpha 850 will carry an official UK retail price of around £2,000.

There are two key technical differences over the Alpha 900, according to Sony.

The Alpha 850 has a 98% viewfinder coverage and three frames per second (fps) burst rate, compared to the 5fps shooting and 100% viewfinder coverage on Sony's 'professional' flagship model, the Alpha 900.

The camera otherwise shares many of the same features, including the weather and dust sealing of its one-year-old sibling, said Paul Genge, technical

sales manager for DSLRs at Sony UK. Similarities extend to the 24.6-million-pixel Exmor imaging sensor, weight [850g] and dimensions.

Sony decided to develop the Alpha 850 following consumer feedback suggesting photo enthusiasts were demanding a lower-priced version of the Alpha 900, added Yojiro Asai, product manager at Sony UK's Digital Imaging Business Unit.

Features include a function that allows photographers to preview their pictures on-screen so they can fine-tune characteristics such as white balance and the Dynamic Range Optimiser before recording the image.

The Alpha 850 also incorporates Sony's SteadyShot Inside image stabilisation, claimed to deliver an anti-shake effect equivalent to 2.5-4 stops of shutter speed. The 3in screen carries a resolution on 921,000 dots.

The Sony Alpha 900 carries a current retail price of £2,500. However, unlike the Alpha 900, a remote control unit will not be included with the Alpha 850's kit.

Sony UK has also confirmed that its 28-75mm f/2.8 SAM lens, which was announced earlier this year, will go on sale in November. The price has yet to be announced.

● For details of Sony's new Alpha 500 and Alpha 550 DSLRs, see next week's *News* pages.

## Samsung reveals WB5000



SAMSUNG is set to release a new 12.5-million-pixel digital compact camera sporting a '26mm' f/2.8 Schneider-Kreuznach equivalent lens at the wide end.

Due out this month, and aimed at photo enthusiasts, the WB5000 features a 3in, 230,000-dot resolution screen and a maximum equivalent ISO of 6400 (at 3MP resolution).

The WB5000 also incorporates raw file shooting, plus aperture and shutter priority and manual shooting options.

Also on board is an HD (720x1280-pixel, 30 frames per second) movie mode, plus optical image stabilisation, blink detection, smile mode and beauty shot.

Samsung UK has confirmed that the camera will cost around £350.

For details call Samsung on 0845 726 7864.





## SNAP SHOT

### New tripod

Manfrotto is set to release a new M-Y carbon tripod, called the 732CY, that is designed to be compact and lightweight, and withstand payloads of up to 3.5kg. 'The M-Y carbon is the perfect solution for the new generation of photographer who is looking for an easy-to-use, compact and lightweight support for their DSLR, without compromising on performance,' claimed a Manfrotto spokesman. The tripod weighs less than 1kg and folds down to 42.5cm when not in use. It reaches 134.5cm when fully extended. The Manfrotto 732CY will cost £169.95 when it hits UK stores this month.

### Race row

Microsoft has confirmed that the image at the centre of an international race row has now been removed from its Polish business website. The move came after it emerged that digital trickery had been used to replace a black man's face with that of a white man. In a statement, a Microsoft spokesman said: 'The image has been removed. Diversity and inclusion are core values and business imperatives of Microsoft, and we apologise for any offence that might have been taken.'

### Press ace dies

One of the first female press photographers, Mary Morris Lawrence, has died, aged 95. Lawrence joined Associated Press in New York as a features photographer in 1936, at a time when there were few females at the agency. She went on to shoot stars such as Marilyn Monroe and Frank Sinatra, and her work appeared in magazines such as *Life*. 'She prided herself in her interviews of being able to get a person's life story in ten minutes,' her husband Harold told the agency.

# Panasonic GF1 goes to war with E-P1



**P**ANASONIC has unveiled the company's first true compact-style Micro Four Thirds digital camera. The Lumix DMC-GF1 is set to go into battle against the Olympus Pen E-P1 when it goes on sale next month.

Boasting a 'neo-classic' design, the GF1 is the third camera in Panasonic's Micro Four Thirds stable.

It houses the same 12.1-million-pixel LiveMOS sensor as featured in the Lumix DMC-G1 and borrows its Venus Engine HD processor from both the G1 and Lumix DMC-GH1.

'The GF1 is primarily targeted at photo enthusiasts looking for a compact camera to use at the weekend or when their DSLR is not with them,' said a spokesman, who claimed the GF1 delivers the responsiveness and image quality akin to a DSLR.

However, Panasonic also hopes it will appeal to compact camera users looking for a 'more powerful

and flexible camera', without having to buy a DSLR.

Promising to be the first in a 'new line-up', the GF1 measures 119x71x36.3mm and weighs 285g body only (100g lighter than the G1). The slightly heavier Olympus E-P1, which debuted in June, measures 120.5x70x35mm.

Leica M and R-mount lenses can be attached using an optional adapter.

A 1.5in 'tilting' external Live View viewfinder (100% field of view) will be available as an optional accessory, for those who don't want to use the camera's built-in monitor.

The GF1 houses a built-in flash and 720x1280-pixel 'HD' movie recording.

A 'peripheral defocus' option aims to enable 'easy and fun depth of field control'. This is for people who are not used to controlling depth of field, although it is adjusted via the camera's aperture in the same way (in other words, it is not software-based).

The GF1 also features an 'exposure meter' graphic,

displayed to illustrate shutter and aperture settings to help newcomers 'understand the relationship' between them.

Functions also include three frames per second shooting and a 3in (460,000-dot resolution) LCD screen.

Also new are two Micro Four Thirds lenses: the Lumix G Vario 20mm f/1.7 'pancake' and Leica DG Macro Elmarit 45mm.

The GF1 will cost £549 body only. It will also go on sale as a kit with a 14-45mm lens and in an outfit that includes the 20mm optic (kit prices to be confirmed).

The firm has no plans to launch a version that includes a built-in optical viewfinder. Neither are there moves to market a new flashgun to complement the smaller proportions of the GF1.

Panasonic also plans to launch 100-300mm f/4-5.6 OIS, 8mm f/3.5 'fisheye' and 14mm f/2.8 lenses.

● Turn to page 45 for AP's exclusive test of the Panasonic Lumix DMC-GF1.

## Home Office: We listened to AP readers



Committed to defending your photographic rights!

THE Home Office says that it listened to concerns expressed by AP readers when it drew up its recently published anti-terrorism guidance on photography in public (see last week's *News*).

The Government issued the circular without notifying the magazine, contrary to the Home Office's repeated assurances that it would issue a draft version to AP ahead of final publication.

A spokesman has since apologised for the apparent mix-up, adding that the draft had been issued to the National Union of Journalists.

Commenting on the circular, which contains no specific reference to photographic enthusiasts, a Home Office spokesman said: 'The Home Office listened to all concerns and requests for clarification...'

'We have no intention of Section 44 or Section 58a being used to criminalise ordinary people taking photos or legitimate journalistic activity.'

'We have issued guidance to all police forces advising them that these offences should not be used to capture an innocent member of the public, tourist or responsible journalist taking a photograph of a police officer.'

'These offences are intended to help protect those in the front line of our counter-terrorism operations from terrorist attack. For the offence to be committed, the information would have to raise a reasonable suspicion that it was intended to be used to provide practical assistance to terrorists.'

In March, AP handed the Home Office a file, detailing the experiences of AP readers.

For details visit 'publications' at [www.homeoffice.gov.uk](http://www.homeoffice.gov.uk).

## Record entries in wildlife comp

THIS year's Wildlife Photographer of the Year competition has attracted 33%

more entries than last year.

Organisers have released two of the winning selection of images in the annual contest, which pulled in a record 43,000 submissions from 94 countries. Pictured below left is 'Footsteps' by

Robert Friel and 'Arctic Fight' by Morten Hilmer.

The contest is sponsored by Veolia Environment, the Natural History Museum and *BBC Wildlife Magazine*.

The overall winner will be announced in October.



© ROBERT FRIEL



© MORTEN HILMER



## Canon debuts first 'touch-screen' IXUS

**C**ANON has unveiled the first Digital IXUS camera to feature a 'touch screen'.

The 12.1-million-pixel Digital IXUS 200 IS (pictured), priced £329, sports a lens that aims to deliver the 35mm viewing angle equivalent of a 24–120mm lens.

The screen includes 'Touch AF', so users can select objects or faces on screen for the camera to track and automatically 'keep in focus', says Canon.

The 3in, 230,000-dot PureColor II Touch LCD allows the photographer to review captured images by dragging their finger across the screen.



Moving and tilting the camera allows users to start and stop movies, for example.

Also unwrapped is the Digital IXUS 120 IS, a £299 model described by the firm as an 'ultra-slim' compact. It houses a 12.1-million-pixel

imaging sensor and a 2.7in, 230,000-dot monitor.

Both cameras feature 'HD' video, recording images at a resolution of 720x1280 pixels.

They are due in shops in 'early September'.



### iPhone back-up

The latest product from Clickfree allows photographers to back up their photographs using the excess storage space on their iPhone or iPod. Clickfree Transformer, priced £45, aims to automatically back up photos to the Apple devices when connected to a computer. Software installation is not required and existing iPhone/iPod data will not be overwritten, says maker Storage Appliance Corporation. Visit [www.clickfree.com](http://www.clickfree.com) for more details.

### Rare Jackson photos

'Rare' private photos of Michael Jackson and his family, many of which have never been seen before, were unearthed just in time for what would have been the late singer's 51st birthday on 29 August. The pictures – released exclusively to AP – document the star's early years. They were found in a collection of music and entertainment photos captured by photographer Michael Ochs. For more on this, see next week's issue.

## Portable printer boasts 'voice guidance'

NEW to Canon's Selphy range of compact portable printers is the ES40, a £179 model that includes a 'voice guidance' system.

The voice guidance instructs the user to 'select a colour' or 'select the area for printing', for example. It also tells the user when the ink cartridge needs changing.

The ES40 sports a 3.5in (230,000-dot resolution) screen and is compatible with 15 types of memory cards, including the microSD type used in mobile phones.

Also on board is an Auto Image Optimise function



that aims to automatically detect and correct 'image imperfections'. An optional Bluetooth adapter will also be available.

## Times comp deadline looms

A SIX-MONTH stint as a trainee photojournalist on *The Times* is up for grabs to the winner of The Times Young Photographer of the Year competition.

The winner will also receive a Canon EOS 5D Mark II (with 24–70mm f/2.8 and 70–200mm f/2.8 lenses), plus a Speedlite flash and a year's membership to the British Press Photographer's Association.

Six shortlisted candidates will be sent on assignment by *The Times* picture editor Paul Sanders, from whom three finalists will be chosen.

Their work will go on show at Canon's Pro Photo Solutions exhibition, due to take place at the Business Design Centre in Islington, London on 27–28 October.

The competition is backed by Canon, which this year celebrates 50 years of making SLRs.

Previous winners have gone on to establish careers with international news wire services or national newspapers.

The closing date is 12 September 2009. For details visit [www.timesonline.co.uk/youngphotographer](http://www.timesonline.co.uk/youngphotographer).

## ClubNews

AP's weekly round-up of club news from all over Britain

### Axminster Photography Group

On 9 September (to mark the date 09.09.09) photographers are invited to document life in Axminster, Devon. The resulting pictures are to be held in a photographic archive for posterity. Visit [www.axphotography.org.uk](http://www.axphotography.org.uk).

### Brancaster Camera Club

AP expert Tom Mackie delivers a talk on 14 September at Brancaster Staithe Village Hall, Norfolk PE31 8BP. The event starts at 7.30pm and costs £2.50. For details call 01485 210 013.

### Kidlington Camera Club

The club began its new season on 7 September with a natural history theme. This year's programme includes training, talks, practical sessions and themed competitions. Meetings take place at Foresters Hall (Marlborough House, first floor), 69 High Street, Kidlington, Oxon OX5 2DN. Visit [www.kidlingtoncameraclub.co.uk](http://www.kidlingtoncameraclub.co.uk).

Send club news to: [apevents@ipcmedia.com](mailto:apevents@ipcmedia.com)



### Amateur Photographer

This week in...

# 1912

AP was extolling the photographic delights of Hampstead Heath – a place that had become more accessible from central London thanks to the Tube.

Gone were the days when visitors had to travel to the Heath by train or 'horse-tram'. And, in AP's issue dated 9 September 1912, Ward Muir was keen to make readers aware that visits to capture the beauty of the Heath should not be limited to Saturday afternoons and bank holidays. 'It is useless to retort that it is only a place of merrymaking for the rowdier sort of Cockney, a pitch for side-shows and helter-skelters,' he argued. 'Even on Bank Holidays... only small portions of the vast Heath are given over to boisterousness. On ordinary days, and especially in the early morning, immense tracts of the Heath are utterly deserted...'



## IMPROVED KITS NOW IN-STORE

Both kits now feature air-damped stands, enhanced modelling lamps and a new style hard carrying case with wheels.

### Apollo 180 Two Head Kit - comprises...

*Two* 180 watt heads with improved modelling light. *Two* light stands - now air damped. *One* 50 x 70cm softboxes. *One* 105cm white umbrella. Hard carrying case for protection - now wheeled for easy transportation.

### Apollo 300 Two Head 'Creative' Kit - comprises...

*Two* 300 watt heads with improved modelling light. *Two* light stands - now air damped. *Two* 50 x 70cm softboxes. *One* 105cm white umbrella. *One* lamp reflector. *One* set colour filters. *One* barn door set. Snoot and honeycombe. *One* 80cm Gold/Silver reflector. *One* wireless four channel radio trigger. Hard carrying case for protection - now wheeled for easy transportation.



*All accessories sold separately but note that most are included in the Apollo 300 'creative' kit.*



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# Review

Your guide to the latest photography books, exhibitions and websites

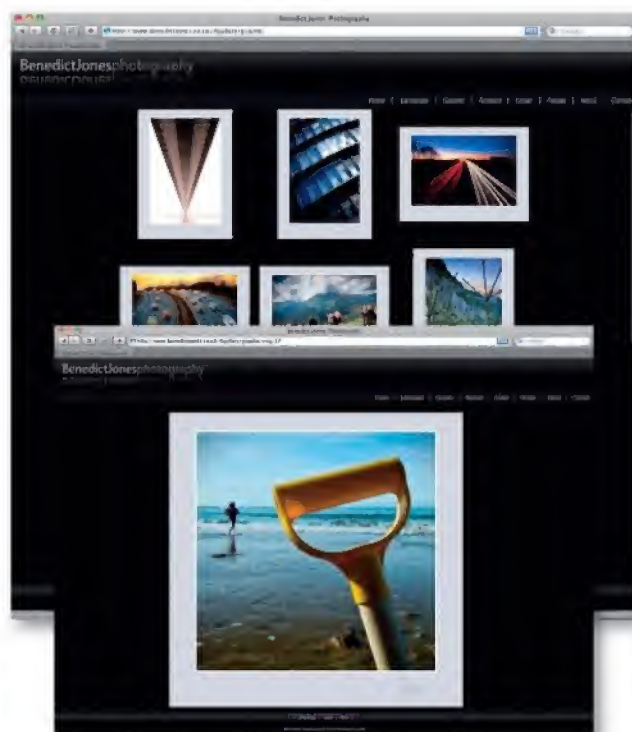
## Website

**www.benedictjones.co.uk**

AP readers often email us a link to their website and we always look at what they are up to. When we looked at Benedict Jones's site, we were impressed the high standard of his images. What is most impressive, though, is that Benedict is an A-level photography student, and to have such a wide range of top-quality images at such a young age is no mean feat. Benedict has also had work exhibited at the gallery@oxo in London and his images have been published in two national magazines.

There are five main portfolios on the site: Landscape, Graphic, Abstract, Urban and People. Benedict's passion is 'graphical landscapes', and while his Landscape portfolio contains a few stark-looking scenes, there are many beautiful riverside views and verdant vistas. The Graphic and Abstract portfolios feature excellently observed snippets of life – from close-up mono shots of flowers to car headlight trails at night. We are sure we will be seeing more from Benedict in the future.

**Gemma Padley**



## Exhibition



## Astronomy Photographer of the Year

10 September–10 January 2010.  
The Royal Observatory at the National Maritime Museum, Blackheath Avenue, Greenwich, London SE10 8XJ. Open Mon–Sun 10am–5pm (last admission 4.30pm). Tel: 0208 858 4422 Website: [www.nmm.ac.uk/visit/exhibitions/astronomy-photographer-of-the-year](http://www.nmm.ac.uk/visit/exhibitions/astronomy-photographer-of-the-year). Admission free

No one really knows what is out there – the 'there' being space, of course. But that doesn't mean we can't use our cameras to create beautiful images of the sky at night. Winning and shortlisted images from this year's Astronomy Photographer of the Year competition are about to go on display at The Royal Observatory in London. The competition is in its first year and coincides with the International Year of Astronomy 2009, which celebrates 400 years of the telescope.

Photographers could enter three categories: Earth and Space, Our Solar System, and Deep Space, and images were uploaded to a dedicated group page on Flickr. The exhibition features photographs of far-off burning cosmoses taken using a telescope and camera, but there are also images photographed with ordinary DSLR cameras featuring landscapes, people or other 'near-earth phenomena' – the moon or aurora, for example. Amateur photographers took all the images that made the shortlist. In addition to the 20 prints on display, there is a video screen with a selection of some of the best images from the Flickr page. To see more images from the competition visit [www.flickr.com/groups/astrophoto/pool/](http://www.flickr.com/groups/astrophoto/pool/).

**Gemma Padley**



# Rotherhithe Photographs: 1971-1980

By Geoff Howard

Vane Publishing, paperback, 80 pages, £22.50 (inc p&tp), ISBN 978-0-9561389-0-3. Copies available from the photographer at [www.geoffahoward.com](http://www.geoffahoward.com)

Geoff Howard's book of photographs of 1970s Rotherhithe, a peninsular district along the docks of London's East End, is unassuming. It doesn't bowl you over with an ambiguous title or try to wow you with its packaging. But it does grow on you. Once you get past the fashion statements of the day you can see that Howard has provided an intimate portrait of a working class community. We tend to look back at times past with an air of arrogance and superiority, but Howard's black & white collection suggests, whether he intends it to or not, that all our change has moved us away from the community spirit once shared in places like Rotherhithe. In his street shots, there are no people lost in their iPods or mobiles. Instead, they're lost in conversation with their neighbours. Howard is a fantastic documentary photographer and proof that you don't need to travel to the deserts of the Middle East to make a compelling photo essay. **Jeff Meyer**



© GEOFF HOWARD

## Book review



© LEE FROST

## Lee Frost's Landscape Photography

*How to take spectacular photographs in all environments*

David & Charles, paperback, 144 pages, £12.99, ISBN 978-0-7153-2564-3

So many people have made books like this, but Lee Frost's guides are some of the better titles out there. While going through the basics of understanding the light, using filters and planning your trip, Frost's latest holds its



value in his chapters of location-specific advice. From coasts to canyons, Frost reveals the most photogenic elements and how you can emphasise them with your camera. The tips and techniques sometimes repeat themselves (he might have been better off telling us when not to use a polariser), but that's to be expected and there is plenty of good information here. Plus, his supporting pictures are stunning. **Jeff Meyer**



© LEE FROST



# Letters

## Letter of the week

wins a 20-roll pack of 36-exposure Fujifilm Superia ISO 200 35mm film or a Fujifilm 4GB media card (in a choice of CompactFlash, SD or Memory Stick)\*. The sender of every letter published receives a free roll of Fujifilm Superia ISO 200 36-exposure film worth £4.99



**FUJIFILM**

### Never happy

I'm sure there will be many readers wanting to help Roger Hicks resolve the dilemma he described in AP 22 August, and I am one such person.

Despite his dubious claim to have been a teenager in the 1950s, Roger's picture suggests he is about 100. He is certainly older than I am (which means more than 77), and I therefore conclude that he may have developed that seemingly incurable condition, commonly observed among older people (older than me, that is) where nothing pleases. As such, I guarantee that he will tire of Arles much more quickly than he has tired of his present abode.

That said, there are many better and more inspiring places to live than between an office and a weekend home, but he doesn't need to go to the trouble and expense of moving to Arles. I have lived in the same spot in mid-Wales for 22 years, and hope to die here. It was my first country home and I never tire of it. I feel excited every morning when I wake up and look out to see what the day looks like as it's always different. I'm quite certain that Roger could picture it better than I.

Incidentally, Vincent van Gogh left Arles because the police closed his home there, following an angry petition by the other residents. Shortly afterwards admitted to a mental hospital in Saint-Remy-de-Provence. Upon release, since he could hardly go back to Arles, he apparently went to Auvers to be nearer his brother. Perhaps if he had lived between an office and a weekend cottage in Arles, there would have been fewer complaints.

**Jeff Walmsley, Powys**

*Let's hope you live in the same spot in mid-Wales for a little longer at least – Damien Demolder, Editor*

**Letter of the Week**

whatever you want by placing an order is basically like dealing with a mail-order company on the internet, but without the price cut. Surely, the attraction of a shop is that you can see what you like, and buy it there and then.

I have no desire to see Jessops (or any other business) slide into decline, but eventually there comes a point of no return.

**M Tomlinson, Wrexham**

### On the cover

I picked up the 29 August copy of AP to see if I had any success in the Looking Closer round of your Amateur Photographer of the Year competition, and I couldn't believe my eyes when I saw my photograph on the cover. This is my first-ever cover shot, and definitely one for hanging on the wall. Many thanks to all at AP for the cover and the new points that bring me a little closer to the top of the leader board. I haven't had the chance to use last month's prize camera underwater yet, but I've taken some shots that I'm very happy with.

**Sean Slevin, Co Wexford, Ireland**

### Point of no return

The item in *News* in AP 29 August, where the former chairman of Jessops gave his views on the reasons for the company's financial problems (much to the annoyance of the current chairman), struck me as an argument that I have believed in for some time.

Years ago, when I visited Jessops, it was undoubtedly a photographic shop, stocking new and second-hand equipment, chemicals, papers, films and all sorts of related accessories. Now, when I visit my local branch, I find myself walking around something akin to a computer shop specialising in picture-making.

Film photography has shrunk to a kitchen shelf with a few boxes

of paper and a limited selection of chemicals. Recently, I called in to find that not even a roll film was on display, yet minutes later I discovered it was for sale in a non-specialist supermarket. It's the old story where people say they are not stocking something because there is no demand. Well, in a few years' time people with any knowledge of film will have been replaced by a generation for whom film is totally unfamiliar. Small wonder there will be no demand.

I have fewer and fewer reasons for visiting Jessops as it stocks less and less of interest to me, and I am sure that a large number of potential customers feel the same way. For Jessops to say that you can get

### We do all right

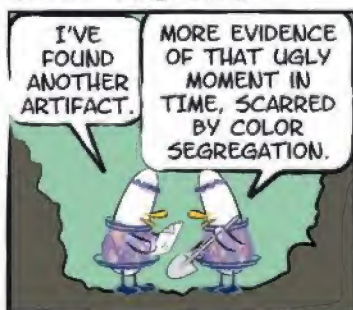
Charles Twist says in his article *The long and the thin of it* (AP 29 August) that, 'Panoramic pictures are either strips of 120 or 220 roll film... (known as 6x17cm) or are made by stitching together pictures taken on a camera with a smaller aspect ratio.'

I have news for Mr Twist. While the format he uses may have the edge on alternatives, some of us do very well with Hasselblad XPans and swing-lens cameras.

**Harold Gough, Berkshire**

*You have a swing lens for your XPan, Harold? Only joking! You are right, of course, as panoramic models exist for almost all film formats – Damien Demolder, Editor*

### What The Duck



Write to Letters, Amateur Photographer, IPC Media, Blue Fin Building, 110 Southwark Street, London SE1 0SU  
fax to 020 3148 8130 or email to [amateurphotographer@ipcmedia.com](mailto:amateurphotographer@ipcmedia.com)

\* Please indicate whether you would like to receive Fujifilm film or a memory card (please state type preferred) and include your full postal address



## A liberating experience

As a photographer for more than 50 years, I was interested to read Graham Horne's letter (AP 8 August) bewailing the possible end of film photography, as my own experience is almost the opposite of his. Like him, my first modern camera was an Olympus OM-1 with various lenses, and I found it an excellent choice. Unfortunately, I had no darkroom facilities so I worked solely with 35mm colour transparency film; indeed. However, eventually I decided that the proportion of failures to successes was making it too expensive to continue and for some time I gave it up.

The coming of digital photography was a liberating experience. Now that I have paid for the camera, the computer, the printer and memory cards, my photography is effectively cost-free. Instead of a camera and several lenses, I carry around one bridge camera with a 28-400mm

zoom lens. I can edit my pictures in my lounge, obtaining effects that would be difficult and time-consuming, if not impossible, to obtain in the darkroom, and delete the failures without expense. True, the old 'core skills that made a photographer' are gradually disappearing, but I doubt if even Mr Horne regrets the passing of even older skills such as bromoil and wet-plate processing. The real skills of photography, as in all forms of art, lie in deciding what effect you want and how to get it, and this is no easier to achieve in digital photography than in film.

**Jim Brown, London E11**

*Indeed it is the decision-making process, and the acting upon it, that produces good pictures, but how can you not regret the passing of wet-plate processing? I can't find suppliers anywhere – Damien Demolder, Editor*



## Happy at Holkham

A friend and I recently spent a short holiday in Norfolk where we visited various stately homes and, as such, became fully acquainted with the usual signs forbidding photography. So, as we approached the front door of Holkham Hall, the traditional home of the Earls of Leicester, and still owned and lived in by the family, my friend and I put our cameras in our bags and zipped them up.

You can imagine our surprise when the very friendly gentleman who took our tickets, upon noticing our bags, told us we could take photographs of anything in the house. We couldn't believe our ears. 'Anything?' we asked. 'Yes,' came the reply. As we were in what is possibly the most dramatic marble entrance hall in England, it was only seconds before my camera was out recording this large amazing room (see above).

I spoke to one of the room stewards about this refreshing approach and he said that it was Viscount Coke's belief that those taking photographs would show them to friends who would in turn visit Holkham Hall. For my part I am pleased to pass on this very welcome news and to encourage other AP readers to support this enlightened family. Let us hope others may be persuaded to adopt a similar policy. Details and opening hours can be found at [www.holkham.co.uk](http://www.holkham.co.uk).

**Ian Gee, Gloucestershire**

*Viscount Coke for president! – Damien Demolder, Editor*

## Back Chat

AP reader **Steve Brewer** is trying to capture a world of his own making

**I**s photography documentation or art? This question has been at the heart of photographic practice from the word go. It is tempting to believe that the camera renders an exact view of the world, that photographs are scientifically accurate copies of reality. And in a way, that's true. Realism has always been a central strand in photography: we think of the camera as a documentary or even scientific tool. Thus photographic practices such as photojournalism, street photography, scientific imaging and the millions of snaps taken by people to chronicle their lives are based on the principle that the camera never lies. We assume that what we see in a photo exists or has existed.

However, even the most scientific photograph is a representation – a 're'-presentation – of reality: an artefact, not the real thing. As such, it is open to interpretation. With such things as camera angles and darkroom tricks, photographers have always been able to pull the wool over our eyes. Today, digital photography and image-manipulation software have further weakened photography's claim to veracity.

We shouldn't forget, either, that photography's artistic,

**I want my photos to express my feelings and my thoughts. If this requires lens distortion, blur and false colours, then bring it on**

creative, symbolic and expressive side has always clamoured for attention. The camera developed from the camera obscura, a device used for centuries by artists as a drawing aid. The artistic impulse of early photography is clear in the work of Oscar Gustave Rejlander, particularly in his 'The two ways of life'

photograph (1857). Drawing inspiration from narrative and religious art, Rejlander produced his own symbolic world in this ambitious combination print depicting virtue and vice. My point is that many photographers have used photography as a way to express their vision of the world, much as artists use paint and other media to give form to their own vision.

Why am I talking about this? I have realised that I am more interested in using cameras to express my personal view of the world than to produce copies of reality: I want vision, not verisimilitude. Of course, I still take photos to record and document, and many of my photos are depictions of recognisable people, places, objects and events. But what really excites me is using a camera and post-processing tools to create my reality. I want my photos to express my feelings and my thoughts. If this requires lens distortion, blur, false colours, cloning, noise, colour cast, curves, levels, cropping, burnt-out highlights, blocked shadows and all the rest, then bring it on. I'm building my world, not the world. My aim is art, however modest.



Amateur  
Photographer  
Technique

# Photo Insight

**DAVID CLAPP** RECALLS HIS FIRST ATTEMPT AT STITCHING TOGETHER IMAGES AND OFFERS HIS TIPS FOR MAKING A SEAMLESS PANORAMA

## The AP experts

Each week, one of our team of experts of Steve Bloom, David Clapp, Tom Mackie and Clive Nichols will reveal the secrets behind one of their great images. This week it's David Clapp

**DAVID CLAPP** Landscape  
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**B**RIXHAM, in South Devon, is a classic seaside town. With a strong fishing community, it's a complementary balance of pavement fish boxes, upturned ice cream, net mending and intelligent gulls. As a local skipper in my early 20s, landing at Brixham on a high tide was always a treat. As we glided through the entrance, the colourful houses rising out of the harbour sat stacked like an expectant theatre audience, the sea walls lined with children clutching crab lines and bright buckets.

One summer evening at the start

of my digital photographic journey, I got it into my head that nearby Sharkham Point was the place to be for a return dawn. A bungled film experiment on the Brixham coast the previous year had left its card, so this was unfinished business. That morning, I slipped down dewy-wet cliffs in trainers to ruin a beautiful coastal dawn with exposure compensation, every shot grossly underexposed. The failure had me so enraged that it was a huge dent in my confidence. I am certain it was this moment alone that defined my hatred for film photography. So there

I was again at pre-dawn, this time armed with digital confidence, my Canon EOS 5D primed, but cursing once more. There was the 'band of cloud', my meteorological nemesis, the shapeless damp duvet of doom, blocking all chance of a rematch. This thick cloud layer spends its time ruining my dawn shots, just mine, all the time – or that's how it felt as I stomped childishly back to the car.

It was time for a cup of tea. The cafés open early in Brixham to fuel fishermen before they fuel their trawlers. Motionless herring gulls stared with cold eyes as I turned





cobbled street corners. The tide was unusually high, so I forgot the tea and walked around. There wasn't a breath of wind, just soft morning harbour sounds. Looking from left to right the whole town was perfectly inverted. I could capture a breathtaking high-tide panoramic, but as I opened my camera bag I suddenly realised – I have no idea how to stitch a panorama!

With a Tamron 28–70mm f/2.8 attached to my Canon EOS 5D, I was certain all I had to do was level the tripod, put the middle of the scene in the centre of the viewfinder and take a few shots in a sweeping action from left to right. So without a bubble level in sight, I bungled my first panorama with a few haphazard images, lined up by eye, and just prayed it would work back home. The camera was set in manual mode to f/20 and this worked to smooth out the slight ripples, but in hindsight this 1/2sec shutter speed wasn't intentional. I was concentrating too much on lining things up. I took just three landscape-orientated shots to capture this huge scene. Looking

“This thick cloud layer spends its time ruining my dawn shots, just mine, all the time – or that’s how it felt”

back now, I realise my method was very crude.

With automated merging software being in its infancy, the editing took many hours. Algorithms were grinding hard drives and steam was pouring from my insufficient PC as my first 270MB image was born. The edges didn't line up perfectly, so I tweaked the limited settings again and again, finally giving up, putting on my retouching overalls and getting under the bonnet. This image was worth the effort. The computer had taken it as far as it could; it was up to me to push it home. **AP**

To see more pictures by David Clapp visit [www.davidclapp.co.uk](http://www.davidclapp.co.uk)

## Talking technique

Since my first bungled attempt, my technique and equipment have become much better. I now use a Really Right Stuff Single Row Pano Kit ([www.reallyrightstuff.com](http://www.reallyrightstuff.com)) to make rotational panoramas. Here's a checklist of considerations when preparing to shoot a simple rotating stitched panorama:

- Choose a walk-around zoom lens for scenes like the harbour shot (below), as this will help you frame the image better
- Put the camera in vertical orientation. It is far better to shoot seven or eight vertical images than two or three images in landscape like I did, as there will be far less distortion (more on this below)
- Level the tripod legs with a spirit bubble, checking that the camera is level as you turn through the scene from one side to the other
- Use a cable release or 2sec timer with mirror lock-up enabled to keep your hands off the camera during exposures, otherwise some shots in the sequence could be soft
- Set your camera to raw mode,

manual mode and the white balance to daylight or similar. Avoid all auto modes, including auto white balance. Each shot's exposure has to be technically identical for seamless merging

- Avoid shooting with the lens wide open. Set the lens to f/8–f/11 to avoid vignetting on each exposure, otherwise the software will have a difficult time stitching the skies
- Meter the camera on the brightest part of the scene and take a test shot. Use this as your setting, otherwise you will swing the camera into a brighter area as you move the camera through the scene and blow the highlights
- Watch the clouds before you start. It can take up to a minute to make seven exposures, so ensure the light levels remain consistent otherwise your picture will look inconsistent
- Leave plenty of overlap room between images for the stitching software to use
- Excessive wind and other movement will cause all manner of problems. You need still conditions otherwise the software will literally always fail. It may mean visiting the scene again and again

### On the computer...

- 1** In raw software, make any colour corrections on just one image, then copy and paste the same corrections onto the other images in the sequence
- 2** Once converted to 16-bit TIFF, correct lens distortion on each picture using software like PTLens ([www.epaperpress.com](http://www.epaperpress.com)) before opening the images in stitching software. This will help align the images more accurately
- 3** Be prepared to retouch. Sometimes pictures just will not go together without strange overlaps, no matter how many times you attempt the stitch. Be methodical and scrutinise your retouching as it will make or break the final result
- 4** Save the archive file at the highest resolution. You can print an enormous image from a seven-shot portrait stitch, but it will not be necessary for most requirements. Having a 200-million-pixel image may be considered an incredible achievement, but it's likely to end up reduced in size for most printing uses



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## **Morning session**

- An illustrated talk by Mike Maloney inside the House of Lords
- Mike Maloney will answer questions and offer advice and assistance

## **Afternoon session**

- A practical session with Mike Maloney in which he will set a photographic challenge, for which a prize will be offered
- James Banfield, Head of Nikon Professional Support from Nikon UK and Simon Stafford, Technical Editor of *Nikon Owner* magazine, will also be available throughout the afternoon

## **Evening at the IoD (Institute of Directors)**

- A celebratory three-course dinner, created by an award-winning chef in the beautiful historic surroundings of the IoD, 116, Pall Mall, London. The Institute of Directors is a magnificent Grade I listed, Crown Estate building, close to the Mall, Trafalgar Square and St. James' Park.

Welcome and opening address by Andrew Main Wilson, Chief Operating Officer of the IoD, who is also a world-renowned travel photographer and Nikon user.

Cost including dinner at the IoD: £245.00 (£195.00 for members of Nikon Owner)

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To reserve a place at the House of Lords Photographic Workshop, please call **020 7828 4925** or for International calls, telephone + 44 (0)20 7828 4925 between 10.00 a.m. – 5.30 p.m. Please note that there will only be a limited number of tickets available.

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In Graham's image of a hammer thrower, the arc of the man's arms provides a sense of movement while the shallow depth of field draws attention to his intense expression  
50-200mm, 1/500sec at f/5.6, ISO 800

# Reader Masterclass

## Colourful candid

**BOB BARCLAY** SHOWS THREE READERS HOW TO CAPTURE COLOURFUL CANDID IMAGES AT THE ISLE OF SKYE HIGHLAND GAMES. **GEMMA PADLEY** REPORTS

**T**HE sound of bagpipes fills the air and swishes of tartan clothing catch in the wind. For this month's *Reader Masterclass*, three photographers from Moray Camera Club join Bob Barclay at The Lump amphitheatre in Portree on the Isle of Skye to capture the colour, character and carnival atmosphere of the Isle of Skye Highland Games.

From track and field events, including the famous tossing of the caber and hammer throwing, to piping and Highland dancing, a traditional Scottish Highland Games always guarantees a lively day out. Safety restrictions meant the sports field itself was off limits, but the dancers, pipers and spectators all around provided ample opportunities to create exciting images.

'I'm looking for bold close-ups of competitors and crowd members, full of action and colour,' says Bob. 'Experiment with your aperture to throw the background out of focus and think about creating tight, interesting crops, such as coming in close on the feet of dancers or the hands of a piper.



L-r: Phil, Linda and Graham in Portree, where the Games were held

Experiment with motion blur or use fast shutter speeds to freeze the action and think about your shooting angle: you don't always have to shoot from eye level.'

The photographers were each equipped with a Samsung GX-20 with 18-55mm and 50-200mm lenses. Bob reminded the participants to choose a lens and focal length to

suit the composition they were trying to create. 'Try a few wideangle shots to capture the atmosphere of the scene, but if you use a greater depth of field, make sure you think about your background and shooting angle to avoid distracting subjects,' he says. Bob was on hand to advise, but it was down to the readers to produce punchy pictures.

## AP's expert

**BOB BARCLAY** worked as a top Fleet Street photographer for more than 30 years, but left photojournalism in 1998 to set up his own studio and photography business in Surrey. During his career, he has covered news assignments in the UK and abroad, and got the first picture of the QE2 in mid-Atlantic as it brought troops home from the 1982 Falklands War.

Born in Scotland, Bob worked for a Scottish news agency before moving to London in 1968. He has worked for 'The Daily Telegraph', the Press Association and Express newspapers, and now freelances.

To see Bob's images, visit [www.robertbarclayphotography.com](http://www.robertbarclayphotography.com).







**Plain-coloured backdrops like this marquee make great clean backgrounds**  
50-200mm, 1/3000sec at f/5.6, ISO 1600

**Linda creates an abstract image by coming in close on these colourful drum reflections**

18-55mm, 1/250sec at f/5.6, ISO 800



**I still need to work on the technical aspects of capturing action, but I now feel more confident in my ability**

### Bob says

Linda was very good at cropping and she had an eye for colour. When she was panning with the action, some of her images were slightly out of focus so I explained how to use continuous focusing to make them sharp. I also reminded Linda to vary her shooting angle. Low angles work especially well for capturing action that is close to you because you can create a sense of drama and excitement. Linda's drum

image (above) demonstrates a subtle use of colour and inventive use of reflection. She has used a bold crop, but has still included the kilts in the frame, which adds to the Scottish context. The bold crop draws attention to the coloured reflections and shows she was thinking about how to frame her compositions. Linda was great at spotting detail and I liked how she didn't give up until she got the picture she wanted. She had great

enthusiasm, too. In her other image (top), the girl is deep in concentration. Linda has captured a great expression and mood, and the tent in the background provides a clean backdrop, which makes the subject stand out. It is a tightly cropped composition, but there is still some space to the left of the frame. If Linda had shifted her shooting angle slightly to the right she could have removed this space, but as it stands it is an excellently observed image.



### Linda McMahon

**Age** 52  
**Lives** Moray  
**Occupation** Training facilitator for council  
**Photographic interests**  
Abstract photography

When I'm out taking pictures, I tend to concentrate on a single subject or stay in one place until I get a shot I am happy with, but on this occasion I tried using different shooting angles and moved around a lot more. Bob's tuition was useful and I tried to keep the brief in mind throughout the day to make sure I gave all the different techniques a go.

I had a good selection of shots by the end of the day, including some with blurred backgrounds or where I had concentrated on a small detail. I enjoyed shooting from a low angle because you can create interesting effects, but this wasn't always appropriate because you risked looking up people's kilts! I could see the image I wanted to create in my mind, but achieving it was more of a challenge. I still need to work on the technical aspects of capturing action, but I now feel more confident in my ability to use different shutter speeds to create a range of effects.

It was easy to feel a little overwhelmed at the start because there was so much going on, but I began to tune my eye into individual subjects and became more focused as the day went on. I was thinking carefully about my choice of subject and where I was standing to take my shots; I also paid close attention to the settings I was using.





## Graham Clark

Age 50

Lives Moray

Occupation Electrical engineer

Photographic interests

Wildlife and sports photography

I enjoy photographing live events because there is always so much going on. I'm not overly confident when approaching people, but as the day progressed my confidence grew and most people were happy to be photographed.

I was drawn to the runners and competitors because I wanted to capture movement. I used the telephoto lens to get in close to the action and changed my shutter speed depending on the effect I wanted to create. I used a shutter speed of 1/30sec when photographing the long jumpers and panned with them to capture the blur as they moved. I also switched the camera to a multi-shot setting so I could take several exposures in quick succession.

There were numerous subjects to photograph throughout the day and Bob encouraged us to experiment with our compositions – to try a different viewpoint, experiment with a larger aperture and focus on subject details such as parts of bagpipes, which I tried to do. I don't usually work to a brief, but it focuses your mind and makes you think about the images you are taking.

“There were numerous subjects to photograph throughout the day and Bob encouraged us to experiment”



Bob encouraged the photographers to zoom in close on small details, such as this piper's fingers  
50–200mm, 1/90sec at f/5.6, ISO 200

## Bob says

Graham was very good at 'finding' a picture. From the start he was thinking carefully about his cropping. Graham's image of the little girl (below) works because it is spontaneous. He has captured her expression beautifully and used a shallow depth of field to make his subject stand out from the background. You need quick reactions to capture a shot like this, and Graham was great at anticipating when to fire the shutter. The kilts in the background and the flag blowing in the wind combine to create a very Scottish-looking picture. In his other image (left), Graham draws attention to the piper's fingers by filling the frame with his subject. He has captured some movement in the hands but the overall image is sharp. Images of close-up details only work if the background is blurred and here it gives definition to the edges of the fingers, making the subject stand out even more.



The tight crop and non-distracting background help the subject stand out of the frame  
50–200mm, 1/125sec at f/5.6, ISO 200





Phil's boldly cropped, colourful image emphasises the tension and anticipation of the performers on the day  
50-200mm, 1/250sec  
at f/5.6, ISO 800

**Amateur  
Photographer  
Winner**



Phil uses bold colours and an unusual angle to create a well-balanced composition with impact  
50-200mm, 1/125sec  
at f/4.5, ISO 400

## Bob says

Phil was confident and took a lot of pictures, but some of his early images were repetitive. At live events it is easy to see an interesting subject and keep pressing the shutter without varying your shooting position, so I reminded him to move around his subject rather than stay in the same place. Phil's winning image (above) is a very bold crop and he has deliberately not included the girl's head in the frame. By cropping out her head, Phil draws attention to the girl's arms on her hips; if you look closely, you can see the girl's knuckles are clenched so hard they have turned white. This emphasises the tension and anticipation all the performers must have felt. The stern expression of the judge adds to the tense atmosphere. The deep shadows and reflected light from the white ground make this a difficult scene to expose for, so Phil has done well to achieve a correctly exposed image without burning out the highlights. His other image (left) shows good use of colour. Here, bold areas of red and yellow are juxtaposed and Phil has angled his camera slightly down to give an interesting perspective.



## Phil Galloway

Age 63  
Lives Banffshire  
Occupation Retired  
Photographic interests  
Landscapes

I wanted to get an overview of what the Games were about. For me, that meant capturing the expressions of the onlookers and competitors. I was looking out for interesting characters to photograph and tried to include 'clean' backdrops in my compositions. If the subject was a dark colour, I looked for a light-coloured backdrop to complement it. When I wanted to show the environment of the dancers, for example, I tried to choose backgrounds that told the viewer something about the context of the Games.

The day was quite overcast so I kept an eye on my ISO setting and switched to ISO 800 for some of the time. I mainly used the camera in aperture-priority mode so I could control my aperture, but I occasionally used shutter priority. This was useful for photographing the competitors as I could use a slow shutter speed to capture the movement in the arms of a hammer thrower, for example. I'm going on a five-week trip abroad very soon and 'people photography' is high on my list of things to do – this day was great training for that.



## In conclusion...

**A**S the sun and sound of bagpipes began to fade, it was clear the photographers had wholeheartedly embraced the challenges of the day. Packed crowds meant it wasn't always easy to create uncluttered images, but the three participants adapted by choosing their shooting angles carefully and cropping in creative, imaginative ways.

'I was impressed by how quickly the readers picked

up the different techniques,' says Bob. 'As the day went on, they became more adept at adjusting their photographic approach to suit their subject. They experimented with aperture control, and came in close on details and were aware of the backgrounds they were using. The day was quite cloudy and they altered their ISO depending on how the light changed. All three gradually became more confident when

photographing people and made sure they moved around their subjects rather than staying in one place.

'Approaching people is never easy, but they had the courage to seek out unique candid images. Most impressively, they looked for expressions on people's faces, which is key to capturing the atmosphere of a live event. Overall, they showed great enthusiasm and created some truly excellent images.'



**Bob took this image from a low angle to focus attention on the colourful kilt as it billowed in the wind. He used a shutter speed of 1/500sec to freeze the motion, but the fanlike shape of the skirt creates a sense of movement**



about how your background will look. In Phil's image of a piper, (below left) the background is blurred but the girl doesn't stand out as much as she could. If Phil had zoomed in closer using his telephoto lens, or changed his vantage point to include fewer spectators, he could have made the background less busy. Phil's other image (left) of a different girl is a much 'cleaner' composition. He has used a large aperture to blur the background, but also made sure the background subjects balance with the main foreground subject. You can just see a runner making his way towards the viewer, but he is not competing for attention with the girl.



'When taking pictures at live events, using a wide aperture to throw the background out of focus is a good way to minimise distracting detail and focus attention on your subject,' says Bob. 'The longer your focal length, the more you will be able to blur the background, so use a telephoto lens if you have

one. Wideangle lenses are excellent for adding impact to a foreground subject, but you have to be careful with your choice of background. A wideangle lens will give a greater depth of field so any distracting elements will be more obvious in your composition. Even if you are using a shallow depth of field you still need to think

To see more images by Bob Barclay, visit [www.robertbarclayphotography.com](http://www.robertbarclayphotography.com) Special thanks to the Isle of Skye Highland Games. For more information visit [www.skye-highland-games.co.uk](http://www.skye-highland-games.co.uk)



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**Reader Masterclass** Every month we set three AP readers an assignment over the course of a day. Each participant will use a 14MP Samsung GX-20 DSLR fitted with a standard 18-55mm zoom, though Samsung supplies other lenses for specific subjects. The person who takes the photograph judged the best picture of the day will win a Samsung GX-20 with an 18-55mm lens, worth £700.

**If you would like to take part**, send a letter, including your age, photographic interests and daytime phone number, to: **Reader Masterclass, Amateur Photographer, IPC Media, Blue Fin Building, 110 Southwark Street, London SE1 0SU** or email us at [amateurphotographer@ipcmedia.com](mailto:amateurphotographer@ipcmedia.com).

**Thanks to Samsung** for providing all the readers taking part this month with a Samsung GX-20 kit and Samsung SD memory card. The Samsung GX-20 is a 14MP DSLR with advanced features, great handling and high image quality, aimed at the enthusiast photographer. Visit [www.samsungcamera.co.uk](http://www.samsungcamera.co.uk). AP test score 85% (24 May 2008).





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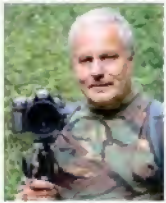
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# Make the most of... late summer



**Colin Varndell** explains why late summer offers a wide range of hidden gems for enthusiastic macro photographers

**L**ATE summer is an excellent time for macro nature photography, as there are still plenty of insects and late summer flowers, as well as some of the early autumn subjects like cobwebs, nuts and colourful berries. The first signs of fungi are just beginning to appear, and mosses and lichens will be sprouting

lush new growth. Macro photography at this time of year can be great fun, and it need not cost a lot of money, either. All you have to do is add a dioptre or an extension tube to a short zoom and you are ready to take amazing close-ups. So why not take advantage of the great flora and fauna in the British countryside.

## Add a dioptre

Accessory close-up lenses or dioptres are single-element lenses similar to magnifying glasses. These dioptres screw into the front element filter thread to provide an inexpensive alternative to splashing out on a macro lens. They come in a variety of strengths and are available in sets of +1, +2 or +4 dioptre magnification. Dioptres are also available to fit Cokin-style square filter systems, as well as lens filter threads. Add a dioptre to a bridge or a compact camera to achieve amazing close-up detail. The picture (right) shows a golden-ringed dragonfly shot in late summer.



Panasonic Lumix DMC-FZ30,  
Cokin +2 dioptre, 1/250sec at  
f/3.6, ISO 200, auto white balance



## Use an extension tube

Extension tubes fit between the rear mount of the lens and the camera body to enable the lens to focus closer in order to produce a larger image of a small subject. This image of a thick-legged flower beetle was shot using an 18-200mm zoom lens with a 20mm extension tube added. Tubes are a much cheaper alternative to buying a macro lens, but they are tricky to use in the field. Also, with an extension tube fitted, you lose the infinity end of your focusing range. Add more tubes and this becomes increasingly more limited.

Nikon D200, 18-200mm,  
20mm extension tube,  
1/125sec at f/11, ISO 400,  
auto white balance







### Use a third hand

A third-hand device is an essential macro accessory for holding small subjects like twigs or ferns in place. It will enable you to support or position subjects just where you want them, in the best light and with the most complementary background. A third hand can provide endless possibilities when positioning your own printed (matt-finish) backgrounds.



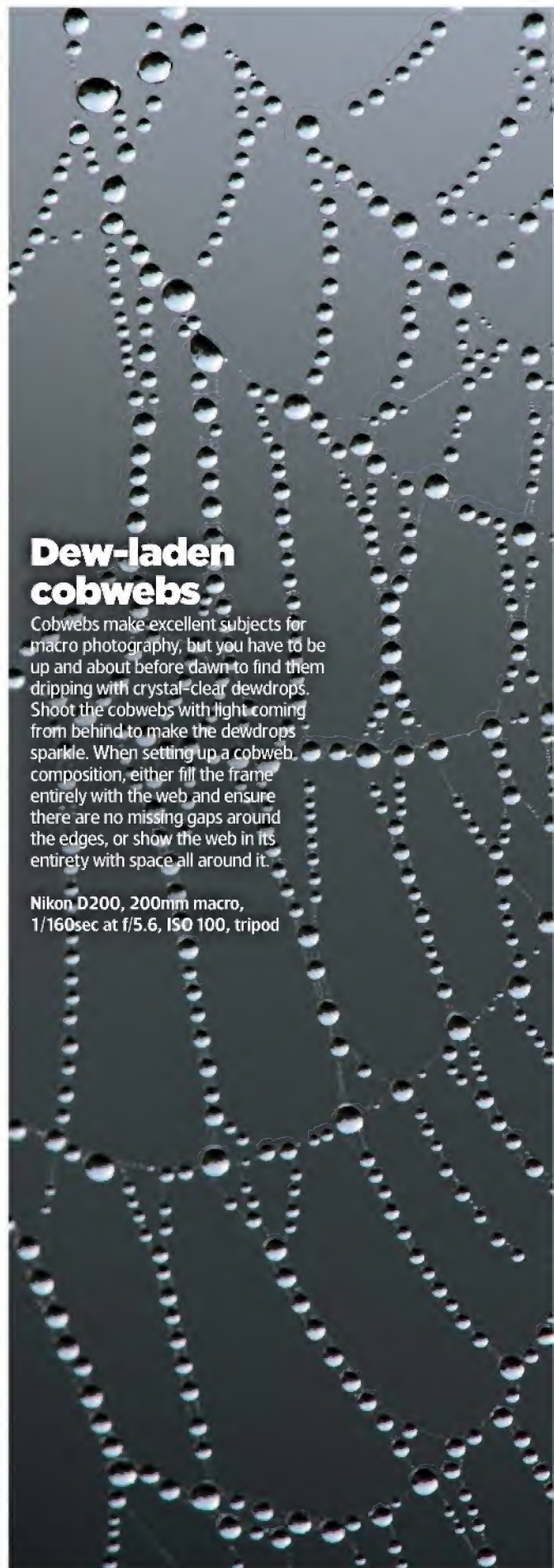
Nikon D200,  
150mm macro,  
1/125sec at f/11,  
ISO 100, auto white  
balance



Nikon D200, 150mm macro,  
1/320sec at f/5.6, ISO 100,  
auto white balance

### Focus carefully

Depth of field in close-up photography is at a premium, and the closer you go the more this reduces. The point of focus is therefore critical and autofocus is rarely a reliable option in such situations. A subject may look sharply focused in the viewfinder and even on an LCD panel, but always check this by enlarging part of the image, or use Live View if your camera has that function. You can even change the appearance of an image by focusing on a different plane. In this pair of pictures of a teasel head, both were shot at maximum aperture but the point of focus was changed by just a couple of millimetres to produce an entirely different effect.

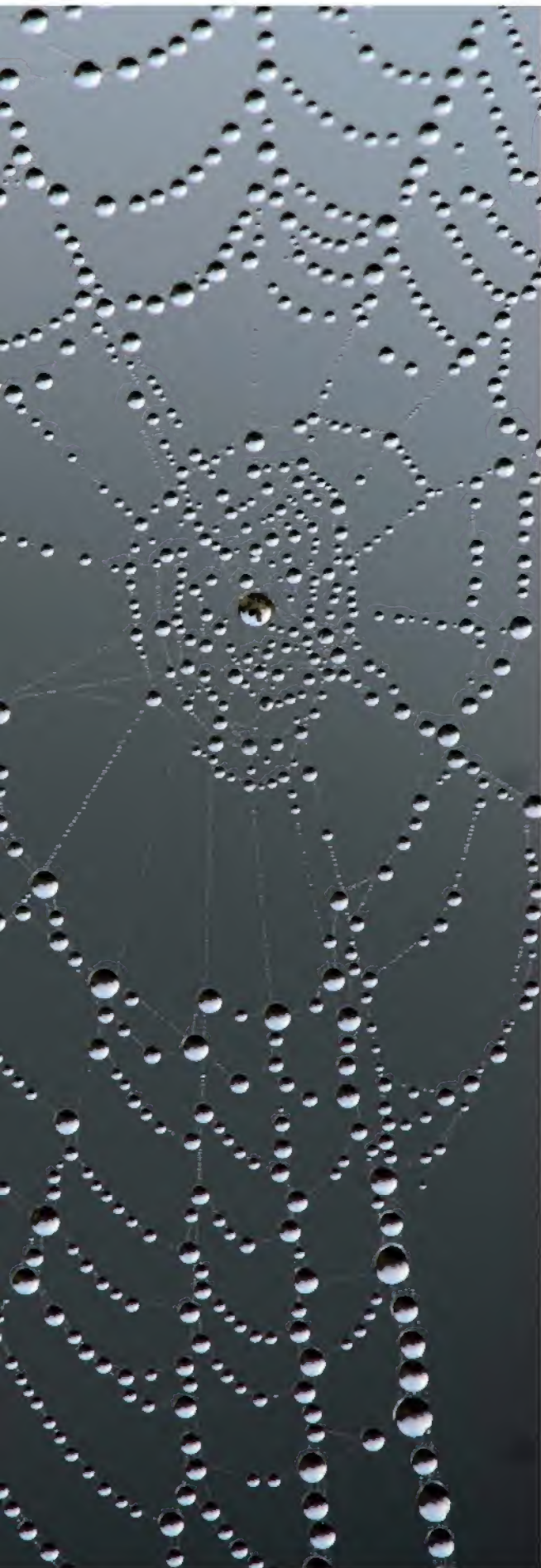


### Dew-laden cobwebs

Cobwebs make excellent subjects for macro photography, but you have to be up and about before dawn to find them dripping with crystal-clear dewdrops. Shoot the cobwebs with light coming from behind to make the dewdrops sparkle. When setting up a cobweb composition, either fill the frame entirely with the web and ensure there are no missing gaps around the edges, or show the web in its entirety with space all around it.

Nikon D200, 200mm macro,  
1/160sec at f/5.6, ISO 100, tripod





Nikon D200, 150mm macro, 1/10sec at f/8, ISO 100, auto white balance

## Check your composition

The look of a macro subject can change dramatically by viewing it from different angles. Remember to consider how the subject looks from above and below as well as side-on. Also, if possible, move around

the subject to view it from all sides as this may produce different backgrounds. These three pictures of sulphur tuft toadstools demonstrate how an different effect can be achieved just by changing the viewing angle.



Nikon F100, 105mm macro, 1/15sec at f/11, Fujichrome Velvia 50

## Fine-tune compositions

Although we can crop and change things with software later, it is still the best policy to fine-tune compositions in-camera at the time of shooting as much as possible. This will help to preserve maximum information. With close-up pattern details, I like to make sure they either fill the frame completely to bleed off every edge, ensuring there are no gaps in the corners, or to give the subject room and show the entire pattern with space all around it. These two shots of the same fungus were taken to illustrate these two approaches to macro patterns.



Nikon D200,  
150mm macro,  
1/50sec at f/16,  
ISO 100, auto  
white balance



Nikon D200,  
150mm macro,  
1/30sec at f/16,  
ISO 100, auto  
white balance



## Consider the angle of light

Look at your subject from different angles to see how it appears with ambient light striking it in front or from behind. These two shots of silk button galls on an oak leaf demonstrate the extreme different effects of front and back lighting. In the shot immediately above, with the light coming from behind, the galls appear to be almost floating above the leaf.

## Shoot into the light



Nikon D200, 150mm macro,  
1/125sec at f/3.2, ISO 100,  
auto white balance





Try shooting close-ups of morning dew at full aperture. This makes any out-of-focus highlights look like bubbles. Shooting into the light emphasises the highlights (see left), but take care to shade the front element of the lens to prevent flare. The picture below is of dewdrops on moss spore capsules, shot in early morning sunlight.



**Nikon D2x, 200mm macro, 1/1600sec at f/4, ISO 100, auto white balance**



**Nikon D200, 150mm macro, 1/50sec at f/11, ISO 100**



## Use a mirror to fill in shadows

In macro mode, we have the opportunity to play around with ambient light on sunny days. Try shading the sun when it is high or harsh and reflect it back onto the subject from a lower angle with a small mirror. These blackberry pictures were shot in natural sunlight. For the shot on the left, the berries were shaded from the sun and a mirror was used to reflect the sunlight horizontally to simulate light at the end of the day.



**Nikon D200, 150mm macro, 1/13sec at f/8, ISO 100, cloudy white balance**



## Keep the camera parallel

The closer you get to a small subject, the more you decrease depth of field. Check that the back of the camera is parallel with the overall plane of your subject in order to make the most of what little depth of field can be achieved. Both these images were shot at f/8 on a 150mm macro lens. The shot on the left has very little sharpness because the camera back was not parallel to the bracken. The camera was moved into a more parallel position for the shot on the right, which shows more of the bracken fronds in focus.

To see more of Colin's images visit [www.colinvarndell.co.uk](http://www.colinvarndell.co.uk). Colin will be holding two one-day autumn nature workshops on 3 October (fungi and macro) and 30 October (New Forest autumn colour). Visit his website for more details



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# Gallery

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**Horia  
Bogdan**  
Romania

**Clifftop and arch**

In this image of Old Harry Rocks in Dorset, the sweeping narrow cliff leads the eye through the scene and to the horizon

Canon EOS 400D, 17-70mm,  
2secs at  $f/16$ , ISO 100, tripod,  
polariser, ND grad filter







Stitching five landscape images together is no easy feat, but Horia has done a great job here. The extreme wideangle lens has really exaggerated the curve of the bay and distorted the whole scene, which, although not technically correct, adds drama to the image. The straight and level horizon is another key element in the picture's success – Damien Demolder, Editor



### Curving bay

1 Horia stitched five vertical images together to create this panoramic view of Durdle Door in Dorset  
Canon EOS 400D, 17-70mm, 1/4sec at f/16, ISO 100, polariser, ND grad filter, tripod

### Cliff-top view

2 A wide angle lens allowed Horia to capture all of this view of Old Harry Rocks in Dorset  
Canon EOS 400D, 10-20mm, 2secs at f/16, ISO 100, polariser, ND grad filter, tripod

### Rocky beach

3 'Kimmeridge Bay in Dorset is covered in cracks that give superb foreground detail,' says Horia  
Canon EOS 400D, 17-70mm, 0.5secs at f/16, ISO 100, polariser, ND grad filter, tripod

## Horia Bogdan

Romania

Horia, 25, started taking pictures of animals and their habitats as part of a biology college course. As he got more into photography, he decided to upgrade his compact camera to a DSLR and began teaching himself about different photography techniques. 'I love photographing landscapes to show the beauty of the natural world,' says Horia. 'Photography takes me to the places I love and provides me with knowledge and joy. There is always something new.' Horia, who is studying for a masters degree in ecology, hopes to explore ecosystems across the world through his photography. To see more of Horia's images visit [www.horia-bogdan.com](http://www.horia-bogdan.com).

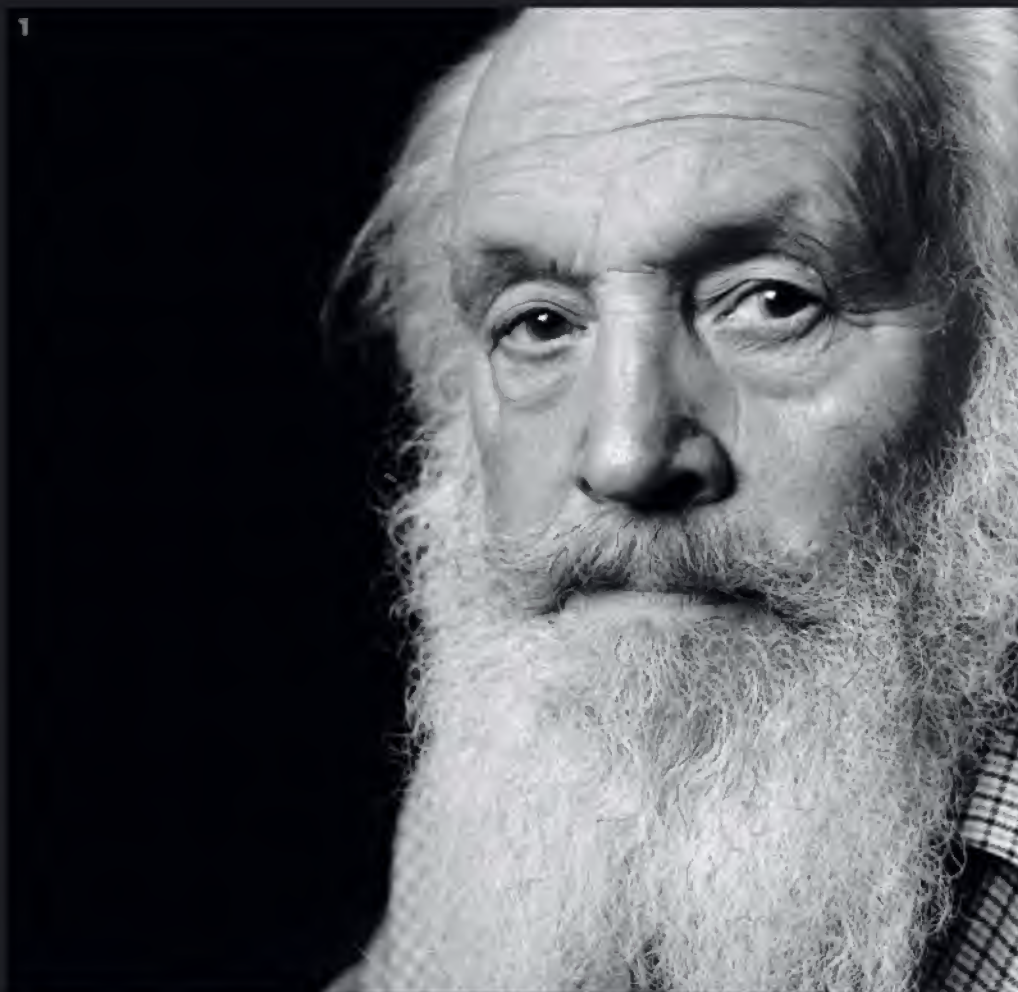




## Damian Drohan

County Cork, Ireland

Damian took these images as part of a photo essay he is working on about his friend Paddy, who is an avid collector. 'I'm also recording audio interviews with Paddy to flesh out the images,' says Damian. 'The interviews detail his life and I find the chats with Paddy invaluable. A conversation can inspire an image.' Damian hopes to publish the finished project online as an audio slideshow or dedicated website, and also publish a book of the images.



### Portrait

**1** Damian used a studio flash with a softbox and reflector to light Paddy's face Hasselblad 500CM, 80mm, 10mm extension tube, 1/250sec at f/11, Ilford HP5

### Cigar ash

**2** 'The cigar and accumulated ash pile tell a story of routine,' says Damian Hasselblad 500CM, 80mm, 10mm extension tube, Ilford HP5



### Tins

**3** The patterns created by the neatly stacked tins appealed to Damian Hasselblad 500CM, 50mm, 1/30sec at f/5.6, Ilford HP5, tripod, silver reflector









## Pier

1 Mark used a polarising filter to balance the contrast between the dark clouds and patches of light in the sky  
Pentax K10D, 10-20mm, 1/15sec at f/11, ISO 100

## Cliff view

2 A slow shutter speed enabled Mark to capture the movement of the tide in this desolate winter scene  
Pentax K10D, 10-20mm, 1/8sec at f/11, ISO 100

## Causeway

3 Mark used his wideangle lens at its widest focal length to accentuate the openness of Whitstable Beach in Kent  
Pentax K10D, 10-20mm, 1/30sec at f/11, ISO 100

## Calm sea

4 'There was no wind, which meant I could capture the stillness of the sea,' says Mark  
Pentax K10D, 10-20mm, 1/100sec at f/9, ISO 100



## Mark Cook Kent

Mark, 39, won the H2O round in this year's APOY competition (see AP 25 July). 'There is no better feeling than getting out with a camera and exploring the English countryside,' says Mark. 'The enjoyment for me comes from being able to record moments in time that would otherwise have passed unnoticed.' Although landscape photography is his passion, Mark is gradually becoming drawn to street photography. He is keen to keep improving his technique and build up his confidence.

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## ICONIC SCIENTISTS

## Ferdinand Hurter

1844-1898

## Vero Charles Driffield

1848-1915

**Geoffrey Crawley** looks at the lives of two men who made a huge impact on photography and gave their initials to the first film speed system

**W**HEN we adjust the Curves and Levels in an image-editing program or study the characteristic curve of a film or the dynamic range curve of a digital camera, we are following in the footsteps of the pioneers Ferdinand Hurter and Vero Charles Driffield, also known as H&D. They laid the foundations for modern sensitometry, which is the science of the response to light of a recording medium.

Although of similar ages, the two men came from quite different backgrounds. Hurter was born in Schaffhausen, Switzerland, while Driffield was born in Preston, Lancashire. After a high school education, 19-year-old Hurter became an apprentice in a silk dyeing works, while studying part-time at the Zurich Polytechnic. He was so successful on the course that his tutor gained a place for him at Heidelberg University in Germany. There he studied climatology, stoichiometry, and analytical and organic chemistry. Graduating *summa cum laude*, the top honours degree, he came to England and took a post at Gaskell, Deacon & Co in Widnes, Cheshire. There he was rapidly promoted to works chemist, where he met Vero Driffield.

Driffield, though a Lancastrian, spent his childhood in London

before returning north to attend the Liverpool Collegiate Institution and Sandbach Grammar School. As a 15-year-old he became interested in photography and in 1865 worked for six months in Henry Sampson's photographic studio in Southport, learning the wet-plate process and emulsion preparation. In 1871, after serving as an apprentice, Driffield joined Gaskell, Deacon & Co as works engineer. Following the amalgamation with United Alkali in 1890, he became works manager.

H&D became friends through a mutual interest in music, and Driffield encouraged Hurter to take up pictorial photography. As a scientist, Hurter was exasperated by the ignorance of exposure determination and of how light acted on the emulsion. He invented a device, the Hurter actinometer, for

## Amateur Photographer

# ICONS

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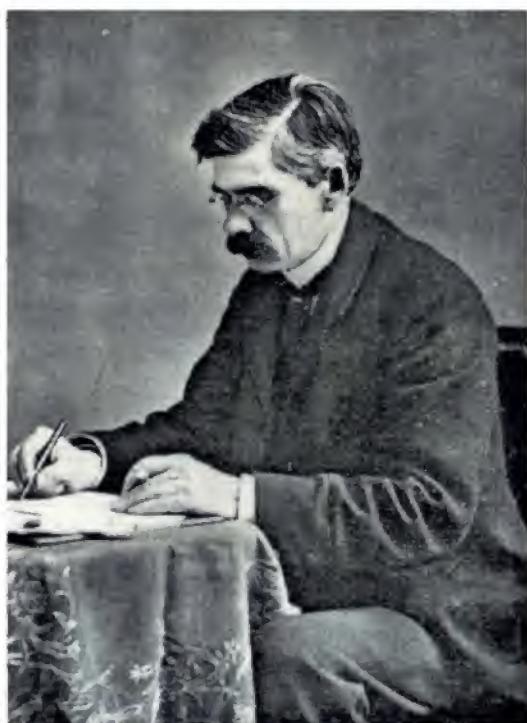
measuring the strength of daylight. Driffield realised the advantages of a scientific approach and assisted in an improved model, enabling the light to be continuously monitored during the day, and from day to day. A year's data, when analysed, provided a seasonal exposure calculator. Since photographers prepared their own emulsions, it was also necessary to determine their sensitivity. They decided to assess it on the volume of light needed to overcome what they termed the 'inertia' of an emulsion and record a minimum density.

At that time, the wet-plate was being replaced by the modern dry-plate, gelatino-bromide process. Now plates could be manufactured and sold retail in boxes. The need to rate their sensitivity was becoming imperative. As an extension of their work on the actinometer, H&D

designed an instrument to give a precise exposure to a plate under test: a sensitometer. They used the British standard candle and a ferrous oxalate developer rather than an organic one. Both were criticised, as was their concept of a precise exposure. The results of their work were announced in a paper to the Society of Chemical Industry on 31 May 1890 called *Photochemical Investigations and a New Method of Determination of the Sensitiveness of Photographic Plates*.

The density (degree of transparency) of the developed silver from an exposed step wedge was measured. Each step's value was then plotted on a graph against the exposure level producing it. The result was the H&D curve. It is still often referred to as such, though the terms 'characteristic curve' for film and 'dynamic range' for digital camera sensors are commonly used. By determining the exposure inertia point and giving it a number, plate users had a reliable emulsion speed number: the H&D speed. The system was taken up by the leading London firm Marion and Co. Soon plates came in boxes with the H&D speed on the label. It was the forerunner of the now global ISO speed system.

Apart from this, the pair made many other contributions of lasting value to photography. Hurter died in 1898 and Driffield ceased photographic research. We should remember that the works manager and the works chemist of United Alkali did all their photographic research in their leisure time: amateurs indeed par excellence! **AP**



**Vero Charles Driffield (far right) and Ferdinand Hurter, inventors of the H&D film speed system**





## Expert advice, help and tips from AP Editor Damien Demolder

# Appraisal

### How to submit your pictures

Send up to six prints, slides or images on CD (please include the original files from the camera along with your submitted versions on your CD). Tell us a little about the pictures and, if you can, include details of equipment used and exposure settings.

Send your photographs to 'Appraisal' at our usual address (see page 3). Please enclose an SAE if you would like them returned.

### Hoopoe Frank Harris

Canon EOS 400D, 28-135mm,  
1/400sec at f/5.6

Bird photography is very difficult, as I'm sure any bird enthusiast will know. First, you've got to find an interesting subject, then you've got to get close enough to fill the frame and make a good picture. I tend to fall at both hurdles. Frank, though, has sent in a collection of pictures that demonstrate that he is able to find interesting subjects and get close to them. I've chosen this picture of a hoopoe. It's certainly an interesting bird, and Frank has got close to filling the frame. I suspect he's done a bit of cropping, but that doesn't matter, as it's sharp, nicely composed, with the whole bird included and its head in the right place.

My only problem is that beyond the fact that it's an unusual-looking bird, there's nothing of any real interest happening. Whether or not it was Frank's intention, he's captured a very factual photograph that presents the bird in a fine pose and in a lot of detail. I suspect that if you're really into birds then you'll find this fascinating. However, it doesn't make me go 'Wow!' Perhaps it lacks creativity.

Given how difficult it is to take this type of picture, I realise that this criticism might sound harsh, but the point of taking photographs is to



get people's attention, and beyond being a well-photographed subject the picture does little to grab my attention. However, I'd be interested to know what other readers think: am I being harsh or not? I have seen what I judge to be brilliant pictures of

birds, but they appeal to me because they are photographically interesting or presented in a dynamic way. To me this is a bit static, but it's a good natural history-type picture, and no doubt very educational. I just find it difficult to get excited by it.



### And the heavens rained fire Charles Woodford

Canon EOS 400D, 70-300mm,  
1/30sec at f/11, ISO 100

Charles says that one of his photographic ambitions is to get his pictures published in the UK's best photo magazine – well, Charles, here's one to get you started. His picture shows the River Forth, looking north-west towards Kincardine

bridge, Stirling and the mountains beyond. Charles has used a neutral density graduated filter to hold back the exposure in the sky and, like his title exclaims, the heavens really are raining fire in a very dramatic shot. He has captured a fantastic moment with





## Resting porter Quinton Murray

Canon EOS 40D, 50mm, 1/800sec at f/2, ISO 100



Quinton is only 18 years old, but he says he's been taking pictures since he was five, when he was given a single-use camera while in Nepal. He says the only barrier so far has been when a monkey jumped down

in Pashupathinath in Nepal and stole his camera, thinking it was a banana. However, I can't think of any camera that looks like a banana, unless it was a Minolta Vectis underwater camera that is painted bright yellow.

Quinton says that Nepal is his favourite subject, particularly the people of the region. This picture of a resting porter was taken in the foothills of the Himalayas. He's used a wide aperture of f/2 to create a really shallow depth of field, although because he's using a 50mm lens on a Canon EOS 40D he's got the slightly telephoto effect of a 75mm optic. It is this combination of focal length and aperture that has created a fantastic picture. There's just enough depth of field to keep the porter in focus, and there's enough detail in the out-of-focus areas for us to clearly see that there is a rope bridge sweeping through the jungle.

The focus is excellent, and although Quinton seems to have focused on the man's shoulder (so I suspect the camera was set to autofocus), when the picture is blown up to its normal size you can see the man's eyelashes, his hair and detail in his T-shirt. What also helps is the soft lighting, which looks a bit like studio lighting because it is coming directly from above. There's no light coming from the sides because it's in a jungle, and so the only place for the light to come in is through the canopy overhead and through the break in the trees where the bridge is constructed. There's also a bit of light reflecting back from the wood of the bridge, giving a little fill light.

The effect Quinton has achieved is just great; the exposure is absolutely spot on, and the colours are excellent. I can't see a way of improving it at all. The bridge maybe isn't quite straight, but it's a wobbly bridge and so it possibly wasn't straight in real life, so it doesn't matter.

It's also interesting to see the out-of-focus effect in the weave of the wire on the side of the bridge. It turns into a mass of confusion along with those leaves in the distance, and really helps to bring out the in-focus porter. It's a great shot, and that's why it's my picture of the week.

the sun streaking out of the sky, like stairways to heaven, illuminating what looks like the tower and steeple of a church in the distance.

Although we can't see anything in the foreground on the silhouetted strips of land, I think it's probably a good thing, because like this they make interesting shapes whereas the reality is probably less attractive. But most importantly, Charles has succeeded in capturing the tonal differences and layers of the hills and mountains stretching off into the distance, which really adds depth to the picture, and is one of the things that often gets lost when people adjust the contrast post-capture.

The problem for me is that streak of light in the water – it conflicts with the soft contrast in the rest of the picture, spoiling the subtle tones. Admittedly, there's probably not much that can be done about it, because the sun is shining directly at Charles and into the camera. Nonetheless, it's a distraction in what is a quiet scene, and although it probably does accurately reflect what the scene was like at the time, in terms of completing the picture it just doesn't quite work for me.

What I try to do on these occasions is move myself: perhaps the light could have been made to fall instead on the spit of land coming from the left-hand side of the frame. In this



Charles has captured  
a fantastic moment  
with the sun streaking  
out of the sky

way, he could have kept the depth and the beautiful transitions in the background, and the water would still have been lit up, but the sun would be reflecting off the land rather than the water. I think it would probably have created a more balanced contrast, although it's possible that there was something on the left-hand side that would have been inappropriate to include.

I've made a quick crop of Charles's picture, which is not necessarily the best crop or one to say that this is how Charles should have photographed the scene. It is rather to demonstrate what it would look like with the harsh sunlight removed.



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**A**P and WDC have teamed up with Light & Land – the UK's leading photographic tour company – to offer an exclusive workshop hosted by landscape legend Charlie Waite and AP Editor Damien Demolder.

This exclusive tour will take place from 8-11 November in the beautiful English Lake District and will be limited to just 14 photographers, to ensure the maximum tuition and guidance throughout.

Based in the heart of the Lakes, in the beautifully situated Glenridding Hotel on the shores of Lake Ullswater, the group will use a private minibus to travel to locations further afield. Charlie Waite, the founder of Light & Land, has a wealth of experience photographing Lakeland landscapes and is

an expert at finding those magical compositions that often elude others.

The Lake District provides an astonishing variety of landscapes: from the bucolic beauty of sheep grazing in the Newlands Valley and the stark setting of the Neolithic Castlerigg Stone Circle beneath shapely Blencathra, to the lovely wooded shores of Rydal Water, the awesome Hard Knott Pass and the towering bulk of the Scafell range, England's highest mountain.

The evenings will provide the opportunity to receive constructive feedback on your work. This tour is designed to appeal to digital and film photographers of all levels and experience, regardless of the format they use.



Charlie Waite



Damien Demolder

## INFORMATION

**Dates:** 8-11 November 2009

**Price:** £830 per person before 30 September, £895pp after 30 September

**Includes:** Full-board accommodation, with daily packed lunch, transport during tour, tuition from Charlie Waite and Damien Demolder.

**Excludes:** Travel to and from hotel, insurance.

**Final booking:** 11 October 2009

**Contact:** Light & Land  
01432 839111 or log on to  
[www.lightandland.co.uk](http://www.lightandland.co.uk)  
Full terms and conditions  
can be found at  
[www.lightandland.co.uk](http://www.lightandland.co.uk)



For full details or to book online visit [www.lightandland.co.uk](http://www.lightandland.co.uk) or call 01432 839111



## Forthcoming tests

In the next few months AP hopes to run the following equipment through the most rigorous testing procedures in the industry...

Nikon	D300s	Sep
Canon	Pixma Pro 9500 II	Sep
Sigma	10-20mm f/3.2 vs	
Tokina	12-24mm f/4	Sep
Samsung	ST550	Oct

## Our guarantee to you

All our tests are conducted by people who understand the product area, as well as photography. We aim to discover any shortcomings, as well as finding those aspects that deserve praise. All our tests are thorough, honest and independent

Welcome to our test, reviews and advice section. Over the next few pages we will present this week's equipment tests, reader questions and technique pointers

## Delkin Devices SD to CF adapter £24.99

**T**HE Delkin SD to CF adapter takes the form of a Type II Compact Flash card, but contains no memory. Instead, it features a slot for an SD card. Once the SD card is installed, the adapter simply slots into a camera's CF card bay.

I used the adapter at a music concert, with an 8GB SanDisk Extreme III, in a Nikon D3. I found that until the camera's buffer was full, I could shoot uncompressed NEF (raw) files at my normal rate. However, once the limit of the buffer had been reached, data was written to the SD card very slowly compared to a 'conventional' Extreme III CF card, and my camera 'froze' for several seconds until enough buffer was freed up to take another shot. Nikon D300s and D700 users should also be aware that Type II CF cards are fractionally thicker than Type I, and these cameras do not support the Type II format. As a result, the Delkin SD to CF adapter is too large for their CF card bays.

**Barney Britton**

● For more information visit [www.delkin.com/store/uk](http://www.delkin.com/store/uk)



**Micro verdict**  
Great for emergencies, but low write times and compatibility issues are a concern

## Brando Ultimate 3-Point leather hand strap \$19.00 inc p&p (around £12)



**T**HE Brando Ultimate 3-Point leather hand strap is designed to distribute the weight of an SLR camera more evenly than a conventional hand strap. Made of leather with a padded rubber rear, the strap wraps around the wrist and is secured with both Velcro and a quick-release mechanism.

Attaching the strap to the camera is fairly straightforward. A plate screws to the bottom of the camera via its tripod screw mount and the attached strap threads through the camera's existing strap loops.

I found that the strap was extremely secure, and even if you let go of the camera completely it only strays around a centimetre from your hand. This makes the strap great for times when your camera may be at risk from dropping out of your hand, such as when photographing from a moving vehicle.

**Richard Sibley**

● For more information visit [www.brando.com](http://www.brando.com)

**Micro verdict**  
An extremely sturdy hand strap, but it may not be to everyone's taste



# Q&A

## How to import successfully

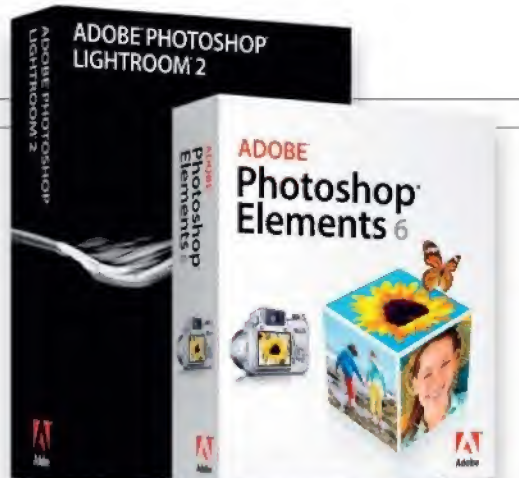
**Sue Webster asks** I currently have around 5,000 images catalogued in Adobe Photoshop Elements 6, but I am thinking of buying Adobe Photoshop Lightroom 2. I'm a little concerned that I will have to re-catalogue all the images again. Is there a way I can import the catalogue into Lightroom?

**Richard Sibley replies** Adobe has made it very straightforward to import Adobe Photoshop Elements 6 organiser catalogues into Lightroom.

In the Elements 6 catalogue select all the images and choose File>Write Keyword Tag and Properties Info to Photos. This will embed any keywords and tags into the image file itself, so Lightroom can read them.

Open Lightroom and select File>New Catalog and then File>Import from Photoshop Elements. Now find your Elements catalogue file and Lightroom will import all the images into the new catalogue.

If you have a number of images this process will take



some time, and a few files may not successfully import. This is usually because of the file format. Try resaving any images that don't successfully import as TIFF files.

Those using Elements 7 should note that Lightroom 2 is currently unable to import catalogue files from this software. This will no doubt be fixed in a future version of Lightroom.

For more information on Lightroom, or if you encounter any problems, visit [www.adobe.com/support/photoshoplightroom](http://www.adobe.com/support/photoshoplightroom).

More questions & answers available at... [www.amateurphotographer.co.uk/faq](http://www.amateurphotographer.co.uk/faq)



## Scanning negatives

**David Dunn asks** I have an HP Scanjet 4070 Photosmart scanner, which scans prints with good results but is not so good with 35mm slides and negatives.

I recently put a film through a

Zeiss Ikonta camera, producing 3 1/4 x 2 1/4 in negatives to see if it still worked. When developed, the negatives looked normal.

I then tried to scan them using the flatbed scanner, first with a white paper backing, then with a mirror behind them. In both cases the scans were so dark as to be unusable.

I am sure I read in AP some years ago that medium-format negatives can be scanned by a flatbed, but I can you tell me how to do this?

**Richard Sibley replies** By using the technique you mention, it is possible to produce an image of a scanned negative, but you will need to perform a fairly extreme Curves adjustment to

## That's sealed it

**Chris Saywood writes** Having replaced the seals and mirror box dampers on three cameras myself, I thought Richard Sibley's answer to Anthony Stewart's query in AP 29 August (see right) was too simple.

Jon Goodman from Texas, in the US, sells incredible camera light seal kits and I was glad I had his illustrated instructions and excellent seal kit. For \$8 (around £5) he sent the kit, a tool he had developed and full instructions.

The trick is mostly about getting the debris of the old seals out, knowing where the seals have to go back in when you only have clean bare metal to look at, how thick the seal has to be when you only have melted 'goo' from the old one to look at, and how sometimes the seal has to be fitted in a slightly different way.

Licking the adhesive on the seals, which lets them slide for precise positioning, is a master trick – and not all the seals, especially in slots, need adhesive.

**Richard Sibley replies** Many thanks for the information and the recommendation, Chris. Readers who are interested in Jon Goodman's light-sealing kit should visit [www.kyphoto.com/classics/sealreplacement.html](http://www.kyphoto.com/classics/sealreplacement.html), where they can find more than 50 generic instructions for replacing the light seals on cameras, as well as Jon's email address. Alternatively, look up his seller name, Interslice, on eBay. We hope to test one of Jon's kits in a future issue.



## Do you have a photographic question that you would like answered?

Be it about modern technology, vintage equipment, photographic science or help with technique – here at AP we have the team that can help you.

Simply send your questions to: [apanswers@ipcmedia.com](mailto:apanswers@ipcmedia.com) or by post to: AP Answers, Amateur Photographer Magazine, IPC Media, Blue Fin Building, 110 Southwark Street, London SE1 0SU.

## FAQ

Frequently Asked Question

More and more digital cameras now feature an intervalometer, or an interval shooting mode. This allows a photographer to take a set number of images at regular intervals, usually with the intention of creating a video animation from the images.

Most videos play at between 24 and 30 frames per second, but if, for example, 24 images are taken over a period of one hour, when you then create a video from the images you can show what happens in an hour in just one second.



## FROM THE AP FORUM

Join our online community, and be informed and entertained

Your questions answered



Ask your question online

amateurphotographer.co.uk

## Spots of bother

**Lee 74 asks** I have had my Nikkor 18-70mm lens for a couple of years now. Recently, I have noticed that on the inside of the rear lens element there are two white spots.

However, they don't seem to show up on any photos that I have taken. Is there any cause for concern and is there any way of removing them without it proving too costly?

**AGW replies** Chances are that they are nothing more than dust specks and they will have no significant impact on performance so are absolutely nothing to worried about.

**Roger Provins replies** They might be fungus – keep an eye on them and if they grow larger you'll need to get the lens cleaned.

**Richard Sibley replies** As AGW has said, they are most likely dust specks, but you should keep an eye on them to make sure they don't get larger, which, as Roger says, would indicate mould.

If the lens does need cleaning and a service, contact Fixation ([www.fixationuk.com](http://www.fixationuk.com)), who will service a Nikon lens starting at around £40.

see the image. Unfortunately, it will not really be suitable for much, except for checking to see what the image is or for producing a contact sheet.

You could try backlighting the negative using a small lightbox, though the results can be just as hit and miss as the scanner's built-in uplight can often interfere. It may be worth trying, but I wouldn't go to the expense of buying a lightbox especially.

Alternatively, if you do have lightbox, use a DSLR and simply take a photo of the medium-format negatives, and then use editing software to invert them and correct the colour.

The best solution would be to buy a

flatbed scanner designed for medium-format negatives. I would suggest the Epson Perfection 4490 Photo, which can scan medium-format negatives up to 6x12cm in size. Although there are better-specified scanners, the 4490 (pictured below) does a very good job and costs £156.58.



Typical subjects for time-lapse photography are small movements that occur over long periods of time, such as flowers growing or buildings being erected.

For best results, you need a tripod to keep the camera steady and in a fixed position, pointing at the subject, and the camera must be set at appropriate intervals. To show something like a flower wilting in heat you might take 20 photographs an hour for a number of hours, while for a building construction you may take only one image an hour for a few weeks or months.

Once the images have been taken they need to be compiled into a video, which is something we are often asked how to do.

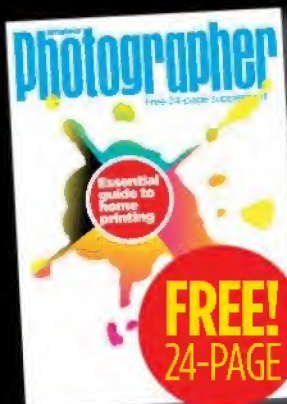
As hundreds of images might be needed to make just a few seconds of video, it is best to resize all the images to a more

appropriate size for video use, or better still, take the pictures at the camera's lowest resolution. A 640x480-pixel resolution will suffice if you plan to show your video on a standard television or the internet. Once the images have been resized, you need to merge them into a video.

There are a number of pieces of software that can do this for you, but perhaps the simplest is Apple's QuickTime Pro, which costs £20 and is available for both PCs and Macs. Select File>Open Image Sequence and select the desired frame rate (the number of frames or images that will be shown each second). Once rendered, the video can be saved to a suitable output size, either for television or internet viewing. For more information on QuickTime Pro visit [www.apple.com/uk](http://www.apple.com/uk). Richard Sibley

# Next week

On sale Tuesday 15 September



## HOME PRINTING SUPPLEMENT

From calibration to continuous ink flow systems, we explain how to produce great prints at home

## On the streets

AP's technical team hit the streets with three different cameras. Find out who took the best images



BARNEY STATION



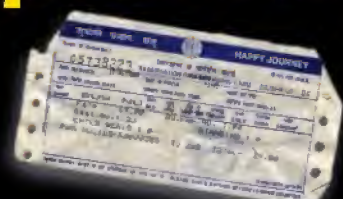
MITCHELL KANASHKEVICH

## Into the light

Top tips from Mitchell Kanashkevich on using natural light and off-camera flash

## Master planner

Amateur Photographer of the Year Steve Mepsted on how planning ahead can produce great shots



**Last resort**  
Richard Sibley looks at how to use colour and vignetting to draw attention to your subject



### Ricoh GX200 + Viewfinder

The Ricoh GX200 is able to reproduce high quality images from edge to edge with low noise and very natural gradation. Features a 24-70mm wide angle optical 3x zoom, 12 million pixel effective CCD, vibration correction function, 1cm macro, high sensitivity to ISO 1600, 2.7 inch 460,000 dots LCD, long battery life approx 350 shots, RAW capture plus 'my settings' feature.

**GX200 Viewfinder Kit £339.97**  
**GX200 Camera only £279.00**

### Benbo Trekker MKIII Kit

Improved leg castings ensure better locking of the main joint. Higher grade leg tubes offer smoother operation when extending the legs. It also folds up to a more compact size enabling easier transportation. The swivel joint at the top of the centre column can be fully adjusted through 180° offering even more flexibility when positioning the camera.

**Benbo Trekker MKIII Kit £109.95**

### Manfrotto 055XPROB Tripod

Makes the Manfrotto-patented horizontal centre column feature easier to use. Extend the column on the 055XPROB tripod to its highest vertical position and it can be swung round to horizontal without removing the head or disassembling the column itself.

**055XPROB Tripod £107.97**  
**055XPROB + 804RC2 MORRIS SAVE YOU £47! £157.99**  
**055XPROB + 460MG MORRIS SAVE YOU £56! £173.99**  
**055XPROB + 488RC2 MORRIS SAVE YOU £58! £181.99**  
**055XPROB + 488RC4 MORRIS SAVE YOU £58! £181.99**  
**055XPROB + 808RC4 MORRIS SAVE YOU £61! £198.99**  
**055XPROB + 410 MORRIS SAVE YOU £71! £237.99**

### Manfrotto 190XPROB Tripod

Makes the Manfrotto-patented horizontal centre column feature easier to use. Extend the column on the 190XPROB tripod to its highest vertical position and it can be swung round to horizontal without removing the head or disassembling the column itself.

**190XPROB Tripod £89.97**  
**190XPROB + 486RC2 MORRIS SAVE YOU £42! £137.99**  
**190XPROB + 804RC2 MORRIS SAVE YOU £47! £137.99**  
**190XPROB + 460MG MORRIS SAVE YOU £52! £147.99**  
**190XPROB + 322RC2 MORRIS SAVE YOU £54! £175.99**

### Giotto's MTL3261B + MH7002-652

Aluminium model offering simple, stable support. The legs feature the new quick action lever leg locks to make tripod set up quick and easy, foam grips on each top leg section mean that repositioning of the tripod is made comfortable. The included MH7002-652 head is great for photographers who require fast and easy camera positioning. All three axes of movement are controlled by releasing one single locking lever for quick operation.

**MTL3261B + MH7002-652 £79.97**

### Gitto GT2541EX Tripod

A versatile support that opens up new shooting perspectives. Thanks to its unconventional design, the legs can be set at any angle and moved independently while the centre column tilts and rotates freely to any position. The Explorer Gitto off-center ball head, when used with a Camlink off-center ball head, a combination that makes it the ideal tripod for creative photographers.

**GT2540LLV Tripod £414.95**

### Gitto Tripods in stock

**GT1541T MORRIS SAVE YOU £60! £359.95**  
**GT2331 MORRIS SAVE YOU £40! £199.95**  
**GT3530LS MORRIS SAVE YOU £70! £449.95**  
**GT3541XLS £530.95**

### Gitto GM2341 Monopod

Features a new aluminium 1.2 mm tube with anti leg rotation. The new tube is the best compromise between light weight and torsion rigidity, and stands in the market as a top quality and performance monopod against all other competitors.

**GM2341 Monopod £94.95**

### Gitto Monopods in stock

**GM1130MT MORRIS SAVE YOU £15! £94.95**  
**GM2561T MORRIS SAVE YOU £28! £141.95**  
**GM5561T MORRIS SAVE YOU £35! £215.00**

### Gitto Heads in stock

**GH1780QR MORRIS SAVE YOU £25! £189.95**  
**G2180 MORRIS SAVE YOU £25! £144.95**  
**G2272M £189.95**  
**GH2750QR MORRIS SAVE YOU £24! £155.95**

### Gitto Accessories

**GA140 Fleece £214.95**  
**GA151 Jacket MORRIS SAVE YOU £60! £289.00**  
**GC2100 Padded Bag MORRIS SAVE YOU £25! £89.95**  
**GC3100 Padded Bag MORRIS SAVE YOU £11! £68.95**  
**G1173/14B Quick Release Plate £21.95**  
**GS5370C Quick Release Plate £21.95**  
**G1220.12983 Set Spikes MORRIS SAVE YOU £5! £29.95**

### Velbon Sherpa CF Tripods

Lightweight yet sturdy tripod for advanced amateurs and semi-professionals alike. Featuring a magnesium body & clip lock carbon fibre legs.

**CF-645 Tripod £166.97**  
**CF-635 Tripod £156.55**  
**CF-545 Tripod £146.97**  
**CF-537 Tripod MORRIS SAVE YOU £130! £139.97**

More on our website  
[www.morrisphoto.co.uk/offers](http://www.morrisphoto.co.uk/offers)

### Gorillapod Original

Firmly secures your compact digital camera to just about anything - anywhere and everywhere!

**Gorillapod Original SAVE £9! £12.97**

### Gorillapod SLR

Gives the same flexibility as the Original model, but robust enough to hold a DSLR firmly.

**Gorillapod SLR SAVE £14! £29.97**

### Gorillapod SLR Zoom

Despite being designed to support a 6lb weight, there is no compromise on size or flexibility.

**Gorillapod SLR SAVE £14! £39.97**

### Thinktank Street Walker Backpack

Ideal slim & lightweight backpack sized to fit carry-on airline dimensions. Holds DSLR and 70-200 f2.8 attached with hood. Front organiser includes pocket for a passport. Lower front pocket supports smaller monopods or tripods with drop down tripod cup for larger tripods. Features two side pockets & two stretch pockets. Seam-sealed raincover included. YKK locking zipper sliders. Removable waistbelt.

**Street Walker Backpack £94.95**  
**Street Walker Pro Backpack £119.95**  
**Street Walker Hard drive Bag £139.00**

### Thinktank Airport International V2

Holds pro size DSLRs and super telephoto lenses with lens hoods, such as the 400 f2.8, 500 f4. TSA approved combination lock secures the main compartment. The zipper sliders fit into the TSA combination lock. Security cable and lock in rear pocket can secure the bag to immovable objects whilst security cable and lock in front pocket can secure laptop cases to the Airport International V2.0. Rain cover included.

**Airport International V2 £229.90**  
**Airport Ultralight V2 £121.99**  
**Airport Antidote V2 £148.99**  
**Airport Acceleration V2 £190.00**  
**Airport Addicted V2 £230.00**  
**Airport Security V2 £260.00**

### Camlink Walking Stick/Monopod

Can be used as a walking stick or monopod. For ease of use the camera platform can be adjusted for vertical or horizontal shooting. Built in anti-shock system makes walking more comfortable. Useful extra features include an ergonomic handle with an inset compass plus a wrist strap.

**Camlink CMP1 £13.90**  
**Camlink CMP3 Monopod £12.95**

### Crumpler Pretty Bella Full Photo

Holds a camera body with 5 lenses and accessories. It can also take a 15" laptop in its laptop sleeve and there is a top compartment for your lunch and jacket. For added security there is a 'weasel-proof' back system and a waterproof ripstop lining for protection against the elements. For comfort it has a padded shoulder strap, a chest harness and a padded back.

**Pretty Bella Full Photo £115.99**

### Crumpler Mullett Laptop Bags

Original 1000D Chicken Tex Supreme hyper performance accessory fabric with water-proof strip lining. Quilted and padded main laptop compartment with protective slipper. Separate large pocket for charger, cables, and other accessories. Tough main zipper opening with metal puller. Soft handle for easy carrying.

**Mullett 7" Laptop Bag £25.95**  
**Mullett 10" Laptop Bag £30.95**  
**Mullett 13" Laptop Bag £31.95**  
**Mullett 15" Laptop Bag £34.95**  
**Mullett 17" Laptop Bag £38.95**

### Tamrac Aero Speed Pack

The perfect solution for the photographer who prefers the comfort of a backpack, but also wants to quickly access photo gear. Tamrac's innovative Dual Entry System™ allows fast access to camera gear through a side door when the packs are worn over one shoulder, and through the front panel when used like traditional backpacks.

**Aero Speed Pack 85 £75.95**  
**Aero Speed Pack 75 MORRIS SAVE YOU £54! £56.95**

### Lowepro Mini Trekker AW

This lightweight, compact backpack will hold a surprising amount of gear in a small space. There's a quick-release integrated tripod holder, attachment loops for optional Sliplock accessories, compression straps and lots of pockets.

**Mini Trekker AW Green £49.95**

### Lowepro Primus AW Backpack

A perfect combination of fast access and all weather protection. Rugged construction with a recycled, water resistant outer fabric and a seam-sealed AW cover protects gear. This pack also conforms to a variety of body types with an adjustable 8-point harness system giving the adventure photographer exceptional comfort under heavy load.

**Primus AW Arctic Blue £54.97**

### Proline Apollo 180 Kit

180 w/s output with stepless variable power range from 1/8th to full. It is of solid metal construction, with a soft rubberised coating ensuring comfortable handling and a quality finish. The low 6V trigger voltage makes it safe to use with any camera. Our kit is the very latest version with sturdier stands, improved modelling light and hard carry case with wheels for easy transportation.

**Apollo 180 2 Head Kit £299.99**

### Interfit EX150 MKII Kit

With 150 w/s the new MKII EX150 has more power than its predecessor and a newly designed polycarbonate body. Easy access to the controls ensures you can set just the right amount of light on your subject. Each head features user changeable flash tubes, switchable modelling lamps and built in infrared sensor to add ease of use.

**EX150 MKII 2 Head Kit (INT182) £199.97**  
**EX150 MKII 3 Head Kit (INT183) £337.90**

### Interfit Strobes

**EFX Kit includes...**  
2 x Honeycombs grid - 20" & 30"  
1 x Snoot, 1 x Vello strap,  
1 x Bounce card set,  
1 x Honeycomb bounce tube  
1 x Soft carry case.  
**Strobe EFX Kit MORRIS SAVE YOU £61! £74.90**

**Portrait Kit includes...**  
1 x Beauty dish, 1 x Globe diffuser, 1 x Softbox (White),  
1 x Barn door set, 1 x Snoot, 1 x Honeycomb,  
1 x Soft Carry Case.  
**Strobe Portrait Kit MORRIS SAVE YOU £20! £99.90**

Please note that to use these Strobes kits with your own flashgun, you will also need...  
**Strobe Flex Mount (all fits) £6.99**

### Interfit 5in1 42" Reflector Kit

Reflector with arm and stand kit, the ideal way to hold 5-in-1 reflectors in place. The versatile swivel joint allows positioning at almost any angle. The standard universal base allows a secure connection to the supplied Interfit lighting stand.

**42" Reflector Kit (INT273) £72.95**

### Hama Wireless Remote

Has a serial release and time exposure with a range of 30 metres, which will travel through walls. Installation is a breeze with the 'remote' input. Features a two-stage release key, which is autofocus, and release.

**Wireless Remote (each) To fit Canon (RS60, RS80), Nikon (MC30, MCDC1), Sony (RSS1) £27.95**

### Braun Multimag 4000 Scanner

Will automatically scan up to 100 slides in a rotary magazine. Digital ice technology incorporated for fast free scans. USB 2 connection, 3600x3600dpi resolution.

**Multimag 4000 Scanner £799.00**

### Braun E150AF IR Novamat

35mm projector that accepts 3 magazine systems. Universal, CS and LWA. Infrared autofocus.

**E150AF £159.99**

### Hoya HD Digital Filters

Top of the range filters designed to get the best from today's digital cameras.

Size	Protector	UV	Circular Pol
52mm	£26.95	£27.95	£57.97
55mm	£28.95	£29.95	£64.97
58mm	£32.95	£33.95	£66.95
62mm	£36.95	£37.95	£73.97
67mm	£40.95	£41.95	£86.95
72mm	£46.95	£47.95	£102.97
77mm	£52.95	£53.95	£129.95
82mm	£60.95	£61.95	£159.95

### Cokin 'P' Graduated Filters

Complete range of Cokin filters, including graduated blue and graduated grey filters always in stock, as is the graduated fluorescent pink filter.

**Graduated Grey (P121 series) ea £15.95**  
**ND Grey (P152/3/4 series) each £11.95**

### Colorvision Spyder 2 Express

Providing quick & accurate monitor calibration, it gives you precise and realistic on-screen colour, true-to-life flesh tones plus flawless shadow detail and highlights in just three steps.

**Spyder 2 Express £59.90**

### Colorvision Spyder 3 Pro

Serious photographers and creative pros require a high degree of color accuracy; from capturing images, to digital editing and printing. This third generation colorimeter comes equipped with new state-of-the-art optical design and user friendly interface providing accurate and consistent color.

**Spyder 3 Pro £95.95**  
**Spyder 3 Elite MORRIS SAVE YOU £36! £133.97**  
**Spyder 3 Print MORRIS SAVE YOU £64! £224.95**  
**Spyder 3 Studio MORRIS SAVE YOU £141! £354.90**

### Ilford Back to School Offer

Sensational offer from Ilford Galerie Special Back to School pack contains 25 + 10 FREE sheets of NEW Smooth Gloss, 25 + 10 FREE sheets of NEW Smooth Pearl plus 50 sheets of A4 Smooth Heavyweight Matt. Demand is sure to be heavy - buy it now!

**Ilford Galerie Back to School Offer £25.00**

### Ilford Galerie Smooth Gloss

Ilford Galerie inkjet paper offers one of the best combinations of convenience and quality available, key features include: Smooth glossy surface. Instant dry (nanoporous). Superb photographic image quality and consistency. Heavyweight look and feel of a real photograph. Excellent compatibility with all good quality pigment and dye based inkjet printers.

A4 25 sheet	£8.27	A4 100 sheet	£23.97
A3 25 sheet	£14.97	A3+ 25 sheet	£16.97

### Lenspen Pro Kit

Kit includes 2 LensPens, 1 MiniPro II, 1 Fog-Off de-misting cloth, 1 MicroClear deluxe microfibre cloth. All included in a convenient padded zip-up case.

**Lenspen Pro Kit £24.95**  
**Lenspen Brush £7.95**

### Lensbaby Composer

Based on a ball and socket system for smooth and accurate movement. Once you bend the composer it will retain its position but you can ensure that it doesn't move by rotating the locking ring. To focus the photographer uses a traditional barrel focusing ring.

**Lensbaby Composer £165.95**



**MORRIS PHOTOGRAPHIC - BEST FOR BAGS and TERRIFIC FOR TRIPODS!**  
[www.morrisphoto.co.uk/offers](http://www.morrisphoto.co.uk/offers)

Morris helpline number: 01608 649224

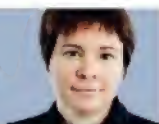
**FREE CARRIAGE ON ORDERS OVER £65 TO U.K. MAINLAND ADDRESSES**  
**All prices valid whilst stocks last**



# Panasonic Lumix DMC-GF1

In the run-up to the announcement of Panasonic's first compact-style Micro Four Thirds camera, the **Lumix DMC-GF1**, AP was given a full production model to test. Is it the end for enthusiast compacts?

Angela Nicholson  
Technical Editor



**P**ANASONIC'S first Micro Four Thirds camera, the Lumix DMC-GF1, has won itself many fans because of its small size, DSLR-style controls and impressive image quality. However, when Panasonic's Michiharu Uematsu first spoke to me about the G1, he asked if I thought people would like an even smaller camera. I told him I thought they would, but that enthusiast photographers wouldn't want much

compromise in the level of control or image quality. He nodded sagely, but I could tell he was pleased by my response. He went on to say that Panasonic could do this by using a more compact-camera-style design. It transpires that the company had considered this initially, but felt the mini-DSLR styling of the G1 better conveys an impression of high image quality capability to the general public. It was clear that Panasonic had big plans for small cameras.

So, it wasn't a huge surprise when, just a few weeks ago, Uematsu returned to our office to reveal a pre-production compact-style camera, called the Lumix DMC-GF1, that

accepts interchangeable lenses. My first impressions were favourable and a short while later I was given a full production model to test. Receiving a production-spec model prior to a camera's formal announcement (made on 2 September) is very unusual, and it means we are able to bring you the first full test of the GF1 in print in the UK.

## Features

Like other Micro Four Thirds cameras, the Panasonic Lumix DMC-GF1 doesn't have a reflex mirror, but it accepts interchangeable lenses. This means it is a hybrid that doesn't fall neatly into the categories that we

## Panasonic Lumix DMC-GF1 Hybrid



## At a glance

- 12.1 million effective pixels
- Four Thirds Live MOS sensor
- Micro Four Thirds lens mount
- 720p video at 25fps
- RRP £549.99 (body only)

generally refer to as 'compact' or 'bridge'.

This lack of a mirror means that when the lens is removed from the GF1, the normal-sized (17.3x13mm)



Amateur  
Photographer  
Lab test

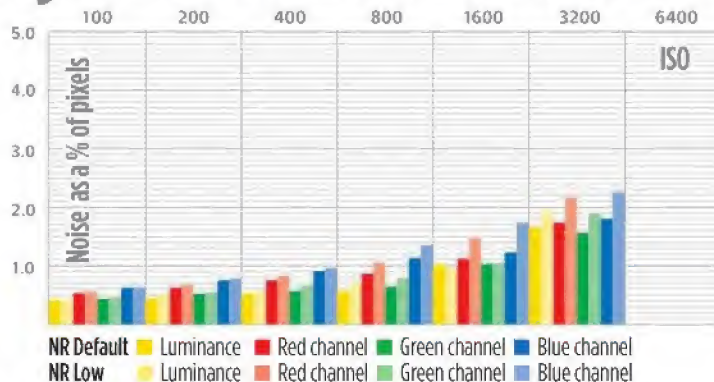




# Resolution, noise and sensitivity

Panasonic has received criticism from some people because of the high level of noise in images from its other Micro Four Thirds cameras. A firmware upgrade for the G1 helped reduce noise levels, but when I produced the graph for the GF1 I could see it has lower levels still. Fortunately, this isn't at the expense of detail resolution and the GF1 impresses on this score. As usual, the raw files have more coloured speckling and greater detail than simultaneously captured high-sensitivity JPEG files.

There is a granular texture visible in images throughout the sensitivity setting range, whether the high-sensitivity noise reduction is set to its highest or lowest setting. However, chroma noise does not



really become apparent in JPEG images until ISO 1600 with noise reduction at its

minimum setting. In its standard setting, the noise-reduction system removes

most of the coloured speckling at ISO 1600, but images are a little softer and, when viewed at 100% on the computer screen, some edges appear to bleed into their surroundings. The difference in sharpness between the standard and low noise-reduction images is apparent when images are sized to make A3 prints.

For dedicated JPEG shooters I recommend customising the film mode options to set the high-sensitivity noise reduction to low to preserve as much detail as possible. The best results, though, are produced from raw files with a spot of post-capture noise reduction.

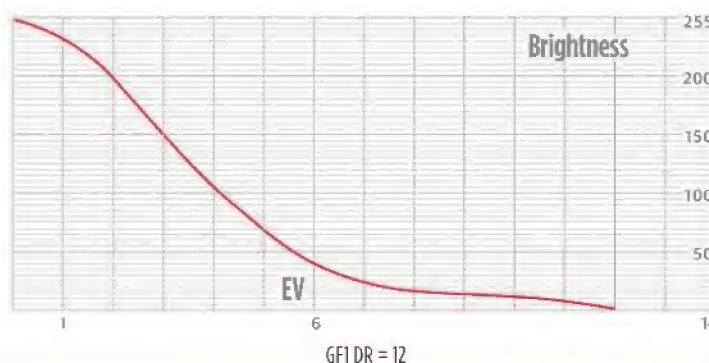
●●●●●●●●●● 28/30

## Dynamic range

An impressive dynamic range measurement of 12EV puts the GF1 on a par with the DSLR cameras that Panasonic intends it to replace. So the reduction in camera size and the Four Thirds sensor – which is slightly smaller than the more common APS-C-sized device – have no negative impact upon the dynamic range.

The GF1's intelligent exposure dynamic range optimisation system made no difference to the result of our dynamic range lab test whether it was turned off or set to its highest setting. With real-world photographic scenes I found that it usually has a fairly subtle impact that manifests itself as a slight brightening of the shadows and midtones of JPEG images. It is useful in high-contrast situations and usually produces natural-looking results, but can make more average scenes appear flat.

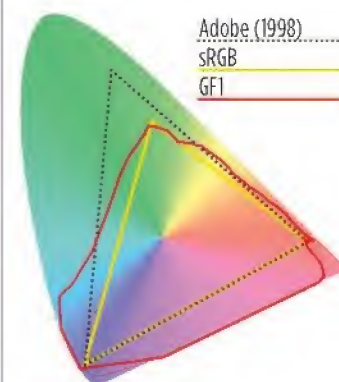
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## Understanding the graph

This graph shows the brightness values recorded by the test camera when it is used to photograph a stepped graduation wedge. The wedge has transmission values in 1/2EV steps ranging from 0 to 12EV. The camera's exposure is set so the 12EV section in the wedge has a brightness value of 255. Software analysis of the image then determines the recorded brightness values of all the other steps and calculates the camera's dynamic range.

## Gamut



When set to its Adobe RGB colour space mode, the GF1 is capable of reproducing a wider range of red, magenta, purple and blue tones than is contained within either the Adobe RGB or sRGB gamut. Like many cameras, though, it struggles to record all the green tones that are encompassed by the Adobe RGB colour space.

Four Thirds-type Live MOS sensor is visible. Fortunately, a built-in supersonic-wave dust-removal system is on hand to keep the 12.1-million-effective-pixel sensor clean.

Images are processed using the same Venus Engine HD device as in the G1 and GH1, and it enables the camera to record JPEG files at up to 3fps or 2fps until the SD (or SDHC) card is full. While these rates are conservative when recording the smallest images, I found that I could shoot 152 highest-quality JPEG images in one minute, giving a rate of around 2.5fps. Alternatively, up to seven raw files may be recorded in a single burst.

Unlike Panasonic's Lumix DMC-G1 and GH1, the GF1 doesn't have

a built-in viewfinder, although an optional electronic viewfinder (EVF) – the DMW-LVF1E – is available. This device slots into the hotshoe and connects to the camera via a small port visible just above the LCD screen. Without this device, images must be composed on the 3in, 460,000-dot LCD screen, which I'll discuss in more depth later.

Panasonic has decided to make the GF1 available body only or in two kits, with a choice of a zoom (price to be announced at the time of writing) or pancake kit lens (kit price £799.99). We have seen the Lumix G Vario 14–45mm f/3.5–5.6 Asph/Mega OIS kit lens before and found it to be a solid performer, but the Lumix G Vario 20mm f/1.7 pancake lens is new. Oddly, the continuous AF mode is not

available when this lens is mounted on the GF1, but the AF tracking and face-detection systems both work.

While the new GF1 can record video, it isn't at the 1920x1080-pixel full-HD resolution of the GH1. Instead, movies are recorded at 720p (1280x720 pixels). There is monaural sound recording rather than stereo, and there is no external mic socket.

Panasonic marketed its first Micro Four Thirds camera, the Lumix DMC-G1, at novice photographers who wanted to move up from a compact camera but were put off by the size, weight and complication of a DSLR. However, the G1's extensive feature set and high level of control make it appealing to more experienced photographers looking for a smaller camera. The Lumix

DMC-GF1 offers a similar collection of features, including a built-in flash, hotshoe, some customisation and saturation, sharpness and contrast adjustment, plus video recording, in an even more streamlined body. It could be perfect for photographers on the move who aren't concerned about appearing to have a mini DSLR.

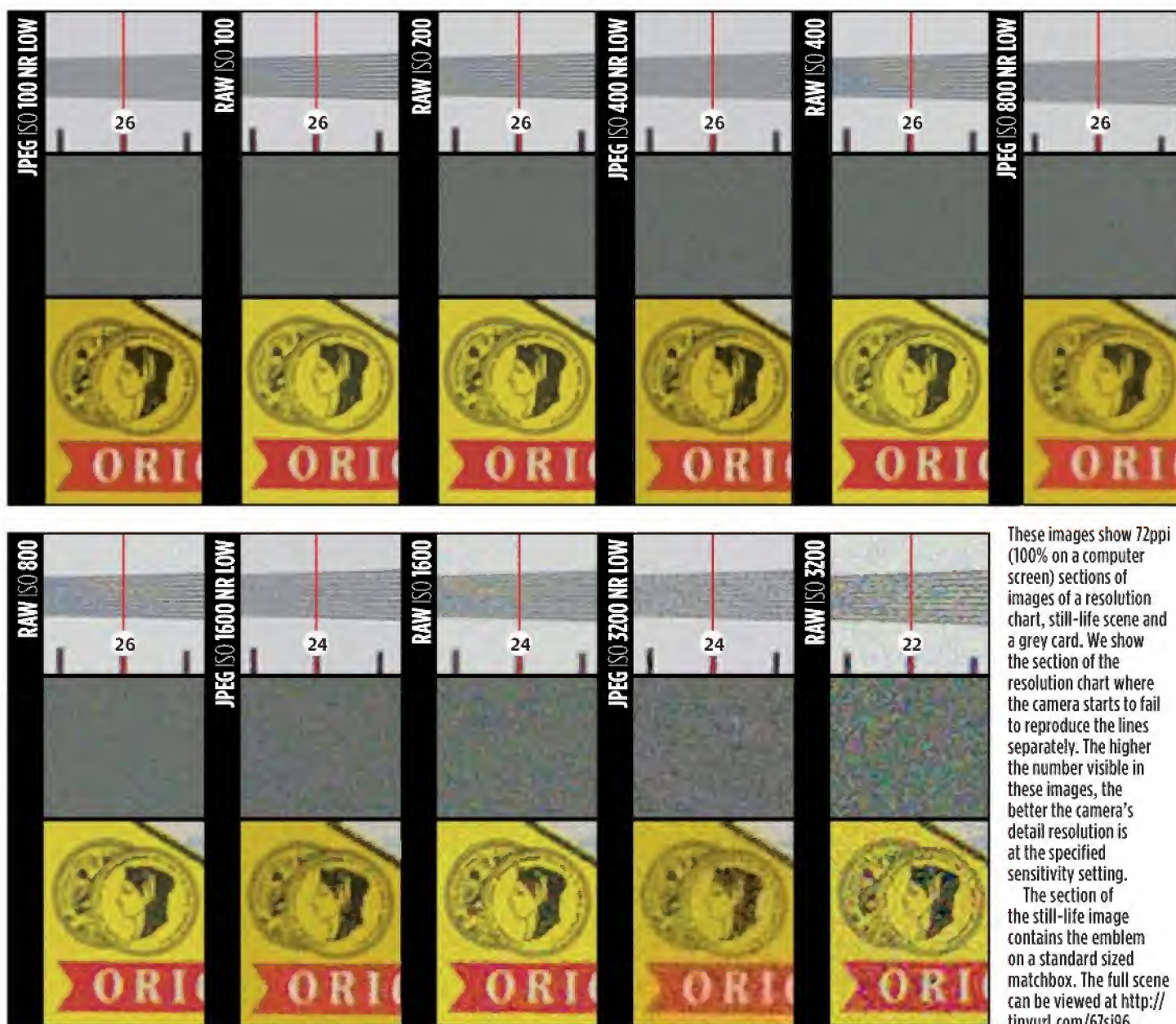
Although we were told our test sample was a final production model, there is always a chance of last-minute changes being made to the firmware. This test was performed on a camera with firmware version 0.1.

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## Build and handling

With the 20mm f/1.7 pancake lens mounted, the GF1 could easily be





These images show 72ppi (100% on a computer screen) sections of images of a resolution chart, still-life scene and a grey card. We show the section of the resolution chart where the camera starts to fail to reproduce the lines separately. The higher the number visible in these images, the better the camera's detail resolution is at the specified sensitivity setting.

The section of the still-life image contains the emblem on a standard sized matchbox. The full scene can be viewed at <http://tinyurl.com/67sj96>

mistaken for a larger version of the Lumix DMC-LX3. The round-edged, rectangular body of the GF1 feels very tough thanks to its aluminium construction, and even the casual observer can see it is a high-quality item. Small ridges on the front and rear of the camera provide just enough purchase for the fingers and thumbs, making the GF1 comfortable to hold between shots. However, I found it more comfortable to carry the GF1 using its strap over my shoulder when walking for longer periods of time. The thumb grip could do with a rubberised pad to give it more grip.

Although it has almost exactly the same functionality as the G1, the change from a mini-DSLR design to a more compact-inspired look has

necessitated a few changes in the control layout. The most noticeable is that the focus mode selection dial on the left of the G1's top-plate has gone and this area houses the pop-up flash unit on the GF1. The focus mode (single, continuous or manual) is selected using the button to the left of the thumb rest on the camera's back. The Quick menu (Q menu) button found on the top-plate of the G1 has also shifted to the back of the GF1 (where it is easier to reach), while the film mode button has disappeared and these settings must be accessed via the quick menu, main menu or Function (Fn) button.

As with Panasonic's earlier Micro Four Thirds cameras, the GF1's navigation controls also act as shortcut buttons to access the sensitivity,

white balance and AF area selection options. In addition, the Fn button can be set to give access to one of eight features. I was torn between using this to reach the dynamic range optimising intelligent exposure and film mode settings. However, it is possible to register up to four sets of personal settings, which are then accessed via C1 and C2 options on the GF1's mode dial. Option C2 provides the user with a choice of up to three stored camera arrangements. There is just one collection of settings available with option C1, making this quicker to use. It is therefore sensible to use this to store settings that are most likely to suit a quick-fire situation.

The Q menu button on the camera's back provides access to 14 camera controls. The options

are located and selected using the navigation controls. If the histogram display mode is activated (via Custom menu 1), the Q menu and navigation buttons can be used to select it so it can be moved around the LCD screen. With 15 options to toggle through, it can take time to reach the desired feature. It would be nice if it were possible to customise the quick menu to reduce the number of options, by removing those that the photographer rarely uses or that have shortcut buttons.

Apart from a problem with reflections on the LCD (see the 'LCD, Live View and video' section for more on this), I found the Panasonic Lumix DMC-GF1 a pleasure to use. Its compact size makes







I let the camera select the AF point for this shot as it was taken from about two feet below ground level. It has done a great job as the cygnet's head is perfectly sharp. The original image was captured in the B&W Smooth film mode and just needed a little brightening with a boost to the contrast

➔ It is an ideal travel partner, especially when coupled with a small lens such as the 20mm pancake, yet it affords plenty of control. The buttons and dials are within easy reach and the menu is clear. However, I would like to be able to customise the My Menu screen rather than use it to access the last five features used.

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## White balance and colour

I was impressed with the G1's automatic white balance system when I tested it in AP 13 December 2008, and the GF1's system doesn't disappoint. It coped admirably with a range of lighting conditions during this test. A sequence of shots taken of a bridge that combines shadow, shade and warm early morning sun look slightly different depending upon whether they were taken using the daylight, shade, cloudy or automatic white balance setting, but they all look natural. Even in the dim, semi-fluorescent-lit gloom of a multistorey car park the auto white balance system managed to produce acceptable results with a hint of

greenish-yellow. The images aren't completely neutral, but they capture the atmosphere well.

Panasonic's custom white balance system is one of the easiest to use. It makes it very clear which area of the scene is being used to calculate the correct colour temperature and does a good job of rendering most targets neutral.

Like the G1 and GH1, the GF1 has a collection of film modes: standard, dynamic, nature, smooth nostalgic, vibrant, b&w standard, b&w dynamic and b&w smooth, which tailor the appearance of JPEG images. Each of these options can be adjusted to the user's taste, and control is provided over the saturation, contrast, sharpness and noise reduction of coloured images. The saturation of images produced using the standard setting can be a little on the high side and it suits some subjects more than others. I generally shoot raw and JPEG files simultaneously, but it's helpful to be able to save my own saturation, sharpness and contrast preferences for JPEG images as 'My Film 1'.

➔ There is little fringing in my images captured using

# Data file

## Focal points

### Supersonic wave filter

The GF1's supersonic wave filter vibrates the air above the low-pass filter over the sensor 50,000 times a second to remove dust, but if necessary the filter can be cleaned with swabs whenever the lens is removed

### Preview modes

The GF1 has aperture and shutter speed preview modes that enable the LCD screen to display how a scene would appear if captured at the selected aperture or shutter speed settings. The shutter speed preview could be very useful when shooting moving subjects and helps determine the desired level of blur when panning

### Software

SilkyPix Developer Studio 3.0 SE is supplied with the GF1 for processing raw files. Although it has a comprehensive set of controls, it isn't tailored to process images from the GF1. Consequently, it isn't possible to apply specific film modes or make in-camera type adjustments to images post-capture

### Four Thirds sensor

This type of sensor results in a 2x focal length magnification factor. As a result, the Lumix G Vario 20mm f/1.7 pancake kit lens has an effective focal length of 40mm, while the Lumix G Vario 14-45mm f/3.5-5.6 ASPH Mega OIS optic is comparable with a 28-90mm lens on a 35mm camera



Panasonic, Panasonic House, Willoughby Road, Bracknell, Berkshire RG12 8FP. Tel: 08448 443 852. Website: [www.panasonic.co.uk](http://www.panasonic.co.uk)

RRP	£579.99
Sensor	Four Thirds-type Live MOS device with 12.1 million effective pixels
Output size	4000x3000 pixels
Focal length mag	2x
Lens mount	Micro Four Thirds
Max file size	Approx 14MB raw, 5.2MB JPEG (high quality, large)
File format	Raw, JPEG, raw + JPEG simultaneously
Compression	Two-stage JPEG
Colour space	Adobe RGB, sRGB
Shutter type	Electronically controlled focal-plane
Shutter speeds	60-1/4000sec in 1/3 steps plus B to 4mins
Max flash sync	1/160sec
ISO	ISO 100-3200 in 1/3EV or 1EV steps
Exposure modes	PASM, plus 4 custom modes, Intelligent Auto, 17 scene modes
Metering system	144-zone Intelligent Multiple, centreweighted, spot
Exposure comp	±3EV in 1/3 EV steps
Exposure bracketing	±2EV over 3, 5 or 7 exposures in 1/3 or 2/3EV steps
White balance	Auto, 5 presets, plus 2 custom and Kelvin settings
WB bracket	No
Drive mode	Single, continuous (Hi/Lo selectable, 3fps/2fps for 7 raw files or unlimited JPEG files), self-timer (10/2secs selectable)
LCD	Fixed 3in TFT with 460,000 dots
Viewfinder type	No, optional EVF
Field of view	Approx 100%
Dioptr adjustment	-4 to +4 dioptre
Focusing modes	Manual, single shot AF, continuous AF,
AF points	23 automatically selectable points, single vari-zone selection
DoF preview	Yes
PC socket	No
Built-in flash	Yes, GN 6m @ ISO 100
Cable release	No, optional remote release
Memory card	SD/SDHC
Power	Rechargeable Li-Ion battery (supplied)
Connectivity	USB 2.0 Hi-Speed/HDMI
Weight	285g (without battery or card/s)
Dimensions	119x71x36.3mm



# LCD, Live View and video

## Flash

The small pop-up flash (GN 6m @ ISO 100) is useful for fill-in purposes, but the hotshoe can accept compatible flashguns such as Panasonic's DMW-FZ20 (GN 22m @ ISO 100) that has an RRP of £127.98

## Exposure meter display

A simple exposure graphic can be displayed on the LCD screen when the exposure is adjusted. This shows the range of settings possible and could help those who are new to setting exposure. Settings outside the recommended range have a red background



## Exposure control dial

A single 'press-and-roll' dial is used to select the exposure settings. In manual exposure mode, pressing this dial switches between the aperture and shutter speed settings, while in the aperture and shutter priority modes it enables the specific settings to be altered or exposure compensation to be dialled in. The selected option is shown in yellow on the screen while the unselected item is white

## Function button

This button can be set to give access to one of eight features including the Film, metering, image quality and Intelligent Exposure mode

Camera shown actual size

### Menu screen



### Quick menu



### Video screen



Although the optional DMW-LVF1E external electronic viewfinder was not available for this test, I have briefly used a pre-production version and I believe that it is a useful accessory. It is especially helpful to those who like to shoot from ground level because it articulates through 90° for convenient viewing from above. It also displays the same information as the LCD screen, so it is possible to assess exposure and change camera settings with it held to the eye. At

the time of writing the price had yet to be confirmed.

Like Panasonic's existing Micro Four Thirds cameras, the GF1 has a 3in, 460,000-dot LCD screen, although the new model has a fixed screen rather than an articulated one. This means the screen is harder to see when shooting from high or low angles.

In low light, the GF1's LCD screen provides a clear view of the scene being composed and, thanks to the 5x and 10x

magnification feature, there is enough detail visible to allow precise manual focusing. As with most LCD screens, the image is hard to see on the GF1's monitor in bright sunlight even when it is at its brightest setting. Even at this setting I found the screen a little darker than the GF1's at its standard brightness.

With a resolution of 1280x720 pixels at 25fps, video from the GF1 isn't quite up to the standard of the GH1, although movement is smooth. Unfortunately,

the mic picks up the sound of the camera's AF system and the photographer's hand movements, and exposure cannot be adjusted during recording. Video may be shot in any of the exposure modes, but exposure cannot be changed during recording footage. Recording can be started at any time by depressing the dedicated button on the camera's top-plate.

7/10





This is the roof of a fluorescent-lit multistorey carpark. I set the custom white balance using the second-nearest concrete beam as a target. It has been rendered nicely neutral, but the lights operate at different temperatures and this has caused the stripes of colour

the 20mm f/1.7 pancake kit lens and this only appears to be a problem in extreme lighting conditions with a few strongly contrasting edges.

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## Metering

I used the GF1 in its 144-zone intelligent multiple metering mode for most of this test and it performed extremely well. It manages to correctly expose the main subject in most instances, even when the scene has some very bright areas.

In the past I have had problems with the G1's live histogram being unreliable, sometimes showing the highlight peak further over to the left than it should. I had no such problems with the GF1 and I was able to use it to guide exposure setting selection.

Compared to the average DSLR, the GF1 has a low-powered built-in flash with a guide number of just 6m @ ISO 100. It is still useful for fill-in purposes, although I recommend using the flash exposure compensation facility to reduce its output by 1/3–2/3EV for more natural-looking results.

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## Autofocus

Being a hybrid camera with no mirror to deflect light onto an AF sensor means that the Panasonic Lumix DMC-GF1 uses a contrast-detection autofocus system. There are four AF modes: face detection, AF tracking, 23-area-focusing and 1-area-focusing. On the whole I found the 1-area-focusing the most useful as it puts the user in complete control over where the AF point is located. Occasionally, I used the option in the custom menu to allow me to shift

the location of the AF point using the navigation buttons. The downside of this approach is that it prevents these controls being used for their assigned shortcuts to set the white balance, and so on. Consequently, I prefer to use the indirect method of positioning the AF point that requires a press of the left navigation button, followed by a press of the down button before the navigation controls can be used to move the point.

Although the GF1's contrast-detection system is slower than the phase-detection systems of most DSLRs, it compares favourably with the Live View contrast-detection mechanisms that these cameras offer.

In the AF tracking mode, the AF area starts in the middle of the frame and half-pressing the shutter release triggers the AF system to attempt to lock on to the subject. Once it has found its target, the camera tracks the subject as it, or the camera, moves. In good light and with reasonable subject contrast, this mode performs well and can keep up with a slow-moving subject. It isn't perfect, though, and because reflections on the LCD screen in bright light can make it hard to see if the point is over the subject, it isn't always the ideal mode to use.

The GF1's face detection mode does a good job of locating faces within the scene and focuses on them reasonably quickly. When focusing on very close or complex subjects it is helpful to use the option in the GF1's custom menu to allow manual focus adjustment while the shutter release remains half-pressed in autofocus mode. Another custom function can also be set to trigger automatic magnification of the on-screen view as soon as the lens focus ring is moved.

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# Our verdict

THERE have been a few cameras that have really aroused my interest and made me look at my bank balance recently, but none more so than the Panasonic Lumix DMC-GF1. It may not be quite the all-rounder or have the lightning-quick autofocus system and incredible low-light ability of a Nikon DSLR, but in good lighting conditions it does a very respectable job. Importantly, it is also capable of producing images with plenty of detail.

Although its design and dimensions put it closer to a compact camera than an SLR in appearance, it offers the level of control we expect from a decent DSLR without too much

delving around in the menu. And significantly for a smaller camera, it feels robust enough to survive being taken just about everywhere. Due to its low profile, the Lumix G Vario 20mm f/1.7 pancake lens is the perfect complement to the GF1. I really appreciated the depth of field control afforded by this fast lens and it allowed me to produce images that just aren't possible using a compact camera with a smaller sensor. Of course, the added benefit of the GF1 over a compact camera is that the lenses are interchangeable. The downside is that most Micro Four Thirds lenses aren't cheap. I'm going to have to start saving my pennies.

# Lab results

Features	●●●●●●●●●●	9/10
Noise/resolution	●●●●●●●●●●	28/30
Dynamic range	●●●●●●●●●●	8/10
LCD/video	●●●●●●●●●●	7/10
Build/handling	●●●●●●●●●●	9/10
Autofocus	●●●●●●●●●●	8/10
Metering	●●●●●●●●●●	9/10
AWB/colour	●●●●●●●●●●	9/10

Panasonic Lumix DMC-GF1  
Tested as: Hybrid  
Rated: Very good  
**87%**

# The competition



**Olympus Pen E-P1**

DATE TESTED 18/7/09



**Canon PowerShot G11**

TO BE TESTED

ALTHOUGH there are now four Micro Four Thirds cameras, only the Olympus Pen E-P1 has the same compact-camera-like design principles. This camera is widely believed to have the same Live MOS sensor as Panasonic's Micro Four Thirds models, yet when images are put under close scrutiny it seems Olympus can't quite match the detail resolution of its R&D partner's cameras. The excellent build quality of the E-P1 is also a little marred by a few odd quirks, including the fact that the shortcut/navigation buttons are rather cramped together with the dial that surrounds them, so it's easy to press one accidentally. At around £549, its body-only street price is the same as the RRP of the GF1.

Excluding the lens, which can be removed for more convenient transport, the GF1 is smaller in two dimensions than the new Canon PowerShot G11, which has an RRP of £569. This true enthusiast-centric compact camera has the benefit of a 28–140mm f/2.8–4.5 zoom lens that retracts into the body when switched off, plus a slim articulated LCD screen for convenient image composition from a range of angles. A past test revealed that the G11's predecessor, the PowerShot G10, could not match the Panasonic Lumix DMC-G1 for detail resolution or dynamic range. However, according to a spokesperson at Canon, the improvements made with the G11, including its larger photosites, mean that the new camera can resolve more detail. It's something I look forward to investigating in the not-too-distant future.



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400/36	1.89 1.79	NON PROCESS PAID		Pan FFP4/HP5 30m	37.50	FB100 B&W	14.25
400/120	2.70 2.60	100/36	3.05 2.95	FP4/HP5 5x4 (25)	19.85	FP3000 B&W	13.50
800/36	3.35 3.25	200/36	3.80 3.70	20	2.20 2.10	<b>CLEARANCE</b>	
1600/36	5.00 4.90	400/36	4.35 4.25	XP2, DELTA 100/400		Fuji Superia 400/36	
FUJICOLOUR REALA		FUJI PRO SLIDE				Dated (08/09)	
ASA/Exp	Each 10+	ASA/Exp	Each 10+			10 Pk £15.00 20 Pk £28.00	
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100/120	3.29 3.19	NON PROCESS PAID		Delta 100 5x4 (25)	21.00	<b>KODAK</b>	
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Pro 400H/120 2.95	2.85	50/36	5.95 5.85	400/36	3.35 3.25	Black & White	£7.50
Pro 800Z/36	5.10 5.00	50/120	3.40 3.30	400/120	2.35 2.25	Close Up	£9.95
Pro 800Z/120 2.95	2.85	100/36	6.05 5.95	1600/36	3.85 3.75	Starburst	£8.95
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100/36	3.60 3.50	100F/120	3.45 3.35	CN400 C41 PROCESS		Visit our website for full illustrated descriptions	
100/120	3.60 3.50	ASTIA		36	3.35 3.25	Japanese Optical Glass Filters	
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VC AND NC		100/120	3.45 3.35	ASA/Exp	Each 10+	40.5mm → 48mm	£8.25
160/36	4.00 3.90	AGFA PRECISA		TRX 400		52mm → 58mm	£6.50
160/120	3.45 3.35	Yes, back in stock!		36	3.40 3.30	58mm → 62mm	£7.75
400/36	5.10 5.00	ASA/Exp	Each 10+	120	3.30 3.20	72mm → 77mm	£10.95
400/120	3.80 3.50	NON PROCESS PAID		TMAX 100/400		82mm → 86mm	£17.50
800/36	5.85 5.75	100/36	3.40 3.30	36	3.00 2.90	Circular Polariser	
KODAK GOLD		100/120	3.45 3.35	120	2.85 2.75	Japanese Optical Glass	
ASA/Exp	Each 10+	KODAKCHROME SLIDE		TMAX 3200		52mm/£21.50 55mm/£23.50	
100/36	2.75 2.65	ASA/Exp	Each 10+	36	3.40 3.30	58mm/£25.25 62mm/£37.50	
200/24 3 pack each	5.75	PROCESS PAID		64/36	3.50 3.40	67mm/£38.50 72mm/£43.95	
200/36 3 pack each	8.75	64/120	3.45 3.35	120	3.00 2.90	77mm/£43.95 82mm/£43.95	
400/24	2.75 2.65	EKTACHROME SLIDE		AGFA B & W		Clip-on Lens Caps	
400/36	3.20 3.10	ASA/Exp	Each 10+	ASA/Exp	Each 10+	27/30/33/37/40/54/58/62	
		EBX100/36	4.05 3.95	APX100/36	2.40 2.25	49/52/55/58/62 £3 each	
		ED 200/36	5.00 4.90	APX400/36	3.10 2.95	67/72/77/82/86/95	

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Nikon F	Nikon F	F	F	F	F	F	F	8mm f8 Nippon Kogaku with vfinder #683xxx	Exc+	E350
Nikon F + Eye-Level Finder Chrome #6452xxx								24mm f2 AIS #233xxx	Exc+	E350
Nikon F + Eye-Level Finder Chrome <b>Sold</b>								24mm f2 AIS #239xxx	Exc+	E230
Nikon F + Eye-Level Finder Chrome								Tamron 24mm f2.5 (AI Fit)	Exc+	E80
Nippon Kogaku Waist Level Finder								24mm f2.8 Nikkor-N AI Converted (nippon Kogaku)	Exc++	E190
Nikon F2 Nikon F2 F2 F2 F2 F2 F2								28mm f2.8 AI #437xxx	Exc++	E320
Nikon F2 with DE-1 Chrome #7640xxx <b>Sold</b>								28mm f4 Perspective Control	Exc+	E170
Nikon F2 Photomic #7118xxx <b>Sold</b>								35mm f2 AI focusing slightly loose <b>Sold</b>	Exc+	E270
Nikon F2AS Black #7782xxx								35mm f3.5 PC #108xxx Very early Nippon	Exc+	E220
Nikon F2AS Black #7937 <b>Brassy</b>								Kogaku Perspective Control. Chromet filter rim	User	E120
Nikkormat Nikkormat Nikkormat								Voigtlander 40mm f2 Ultron SL + hood	Exc++	E70
Nikkormat FT Black <b>New mirror foam</b>								50mm f1.4 AI #4325xxx	Exc++	E130
Nikkormat FTN Chrome <b>Sold</b> as seen								50mm f1.4 AIS #5753xxx	Exc++	E130
Nikkormat FT2 Chrome #5099xxx								105mm f1.8 AIS #192xxx	Exc+	E130
Nikkormat EL Chrome #5591xxx								105mm f1.8 AIS #196xxx Used but Excellent	Exc+	E390
FM FM2 FA F3 FE2 FM2n F3 FE						FM3A	FM2	105mm f2.5 AIS #102xxx	Exc+	E150
Nikon FM3A Black (boxed)								105mm f2.5 AIS (boxed) <b>Sold</b>	Exc++	E230
Nikon FM Chrome #3446xxx <b>Sold</b>								105mm f4 AI Macro #204xxx	Exc+	E220
Nikon FM2n Chrome #8276xxx								135mm f2.8 AIS #921xxx	Exc+	E190
Nikon FM2n Chrome #8429xxx								135mm f3.5 Nikkor-Q AI Converted #968xxx	User	E350
Nikon FM2n Black #7513xxx								180mm f2.8 AIS ED #442xxx	Exc++	E290
Nikon FM2n Black #7571xxx								180mm f2.8 AIS ED #445xxx	Mint-	E320
Nikon FM2n Black #7709xxx <b>Sold</b>						As new		200mm f4 Nikkor-Q C AI Converted #628xxx	Exc+	E150
Nikon FM2n Black #8591xxx (boxed)						Exc++		200mm f4 AIS Macro #192xxx	Exc++	E170
Nikon FM2n Black #8702xxx (boxed)						Mint-		200mm f4 AIS Macro #205xxx	User	E110
Nikon FE Chrome #3083xxx								300mm f2 AIS ED with flip case	User	E110
Nikon FE Chrome #3420xxx								300mm f2.8 AIS ED + hood	Exc+	E150
Nikon FE Chrome #3454xxx								500mm f8 Reflex-Nikkor C <b>Sold</b>	Exc+	E150
Nikon FE Chrome #3824xxx								600mm f5.6 AIS ED Excellent Optics	Mint-	E200
Nikon FE Chrome #3862xxx								28-50mm f3.5 AIS #198xxx (boxed)	User	E110
Nikon FE Chrome #4076xxx								28-85mm f3.5-4.5 AIS #242xxx <b>Sold</b>	Ugly	E90
Nikon FE Chrome #4447xxx								35-70mm f3.5 AI #798xxx <b>Sold</b>	Exc++	E180
Nikon FE Black #3135xxx <b>Sold</b>								35-70mm f3.5 AIS #826xxx	Exc+	E150
Nikon FE Black #3385xxx <b>New mirror foam</b>								35-70mm f3.5 AIS #967xxx	Exc+	E210
Nikon FE Black #3576xxx								35-105mm f3.5-4.5 AIS #2098xxx	Ugly	E150
Nikon FE Black #3905xxx <b>Sold</b>								35-105mm f3.5-4.5 AIS #2149xxx	User	E130
Nikon FE Black #4157xxx								35-135mm f3.5-4.5 AIS #239xxx	User	E390
Nikon FE2 Chrome #2080xxx								35-135mm f3.5-4.5 AIS #251xxx	Exc	E450
Nikon FE2 Black #2538xxx <b>New mirror foam</b>								35-135mm f3.5-4.5 AIS (AIS Flt)	Mint-	E250
Nikon FA Black #5172xxx								35-200mm f3.4-4.5 AIS #206xxx <b>Sold</b>	Exc+	E190
Nikon F3 Titanium Champaign #8215xxx								43-86mm f3.5 AI #798xxx	Exc++	E80
Nikon F3 Titanium Champaign #8216xxx										
Nikon F3 #1591xxx Beautiful condition <b>Sold</b>										
Nikon F3 HP #1375xxx <b>Sold</b>										

## Pre-owned Canon

EOS-1D+Charger & Instructions 9400 Actuators only	Nr. mint	E890
EOS-5D + Charger & Instructions (boxed)	Nr. mint	E950
EOS-5D + Charger	Exc+	E790
EOS-1N RS	Exc++	E320
EOS-1V	Exc++	E390
EOS-3	Mint	E230
EF24mm f2.8 (boxed)	Mint	E270
TS-E24mm f3.5L + hood (boxed)	Mint	E750
EF50mm f1.8 USM	Mint-	E3290
EF50mm f2.5 Macro	Mint	E160
Sigma 50mm f2.8 DG Macro	Mint-	E180
EF-S60mm f2.8 USM Macro (boxed)	Exc+	E270
TS-E90mm f2.8 + hood (boxed)	Mint-	E750
EF200mm f1.8L USM + hood	Exc+	E2290
EF400mm f2.8L USM II + hood & Flight Case	Exc+	E2850
EF400mm f5.6L USM + Soft pouch	Mint-	E790
EF600mm f4L USM IS + hood & Flight Case	Exc++	E4790
FD800mm f5.6L + hood & Flight case	Exc++	E1750
EF-S10-22mm f3.5-4.5 USM	Mint	E450
Sigma 12-24mm f4.5-5.6 DG HSM	Mint	E430
EF-S17-55mm f2.8 USM IS + hood (boxed)	Mint	E590
Tokina 19-35mm f3.5-4.5 AF + hood (boxed)	Mint	E130
EF24-70mm f2.8L USM+ hood	Mint-	E770
EF24-85mm f3.5-4.5 USM (Silver grey colour...)	Mint-	E160
EF24-85mm f3.5-4.5 USM (boxed)	Mint	E200
EF24-105mm f4L USM IS + hood	Mint-	E790
EF28-70mm f2.8L USM + hood	Exc++	E390
Tamron 28-75mm f2.8 XR Di Macro + hood	Mint	E230
EF28-105mm f3.5-4.5 USM	Mint	E140
EF28-135mm f3.5-5.6 USM Image Stabilizer	Mint-	E250
Canon EF2X Extender II	Exc++	E170
Canon 550EX	User	E120
Canon 580EX II	Mint	E270

## Hasselblad

XPAN with 45mm, Centre filter & hood (boxed)	Exc++	E1190
Flex Body (boxed)	Exc++	E750
30mm f5.6 with vfinder hood & center filter	Exc+	E1450
903SWC with Vfinder + A12	Mint-	E1690
SWC/M with Vfinder	Exc+	E2250
503 CW +80mm f2.8 CFE <sup>TM</sup> + A12 (boxed)	Mint-	E1690
503 CX +100mm f3.5 CFT <sup>TM</sup> + A12 Acute Matte D	Exc++	E1350
500CM + 80mm f2.8 CFT <sup>TM</sup> + A12 RV1258xx	Exc+	E750
40mm f4 Distagon CFT <sup>TM</sup> FLE + hood (boxed)	Mint	E1250
50mm f4 Distagon CFT <sup>TM</sup> #6541xx	Exc++	E470
60mm f3.5 Distagon CFT <sup>TM</sup> #6081xx	Exc+	E390
100mm f3.5 Planar CFT <sup>TM</sup> #5788xx (boxed)	Exc+	E450
120mm f4 Makro-Planar CFT <sup>TM</sup> #7176xx	Exc	E690
120mm f4 Makro-Planar CFT <sup>TM</sup> #6653xx	Mint-	E990
1450 150mm f4 Sonnar CFT <sup>TM</sup> #6357xx	Mint-	E320
150mm f4 Sonnar CFT <sup>TM</sup> #6654xx	Mint-	E490
150mm f4 Sonnar CFT <sup>TM</sup> #7035xx	Exc++	E490
150mm f4 Sonnar CFT <sup>TM</sup> #7275xx	Exc++	E450
150mm f4 Sonnar CFT <sup>TM</sup> #8807xx	User	E850
250mm f5.6 Sonnar C #4352xx	Mint-	E150
500mm f8 Tele-Tessa CT <sup>TM</sup> + Hard Leather Case	Exc+	E750
Hasselblad Winder CW	Exc+	E250
Hasselblad Polaroid 100	Exc+	E90
A12 Film Back Chrome #UC470xx	Exc++	E90
A12 Film Back Chrome #RS3175xx	Mint-	E120
A12 Film Back Chrome #UT3327xx	Exc++	E170
A24 Film Back Chrome #UR3511xx New Seals	Mint-	E160
A24-6x6 Film Back Chrome #32ER118xx Latest	Exc++	E220

## Pre-owned Nikon Autofocus

Nikon D3 (complete; boxed) 1600 Actuators	Sold	E2490
Nikon D1X body only	User	E290
Nikon D300 (complete; boxed) 1550 Actuators	Sold	E850
Nikon D80 + Charger	Sold	As new
Nikon F5 #3115xx	Exc+	E320
Nikon F5 #3190xx	Sold	Mint
Nikon F100 #2077xx	Mint-	E230
Nikon F90X Pro #2116xx	Exc++	E120
Nikon F90X #2248xx	Exc++	E70
Nikon F90X #2402xx	Exc++	E90
Nikon F90X #2491xx	Exc++	E700
20mm f2.8 AF-D	Exc++	E270
24mm f2.8 AF-D	Mint-	E220
Sigma 30mm f1.4 EX DC + Hood (boxed)	Mint-	E230
Sigma 50mm f2.8 EX Macro (boxed)	Mint	E130
60 mm f2.8 AF-D Macro	Mint	E230
85mm f1.4 AF-D (boxed) Unused	Sold	As new
85mm f1.8 AF	Exc	E190
85mm f2.8 Macro PC	Mint	E850
Sigma 105mm f2.8 EX Macro + hood	Sold	Mint
105mm f2.8 AF-D Macro	Sold	Mint-
400mm f2.8 AF-S ED + hood	Exc++	E3750
Sigma 10-20mm f4-5.6 DC HSM + hood	Sold	Mint
Sigma 12-24mm f4.5-5.6 DG HSM (boxed)	Mint	E390
17-55mm f2.8 DG AF-S DX + hood	Mint	E690
28mm f2.8 Summicron-M ASPH #3979xx (boxed)	Mint	E270
150mm f2.8 Elmarit-M + hood #2978xx	Sold	Mint-
35mm f2.8 Summicron-M ASPH #3979xx (boxed)	Mint	E170
35mm f2.8 Summicron-M ASPH + hood	Sold	Mint-
3.5cm f2.8 Summaron with specs (M3 fit)	Exc++	E390
50mm f1.4 Summilux #2505xx	Exc++	E950
50mm f1.4 Summilux ASPH #3979xx (boxed)	Exc++	E1490
50mm f2.8 Elmar-M + hood #3727xx	Sold	Mint-
90mm f2.8 Elmarit Chrome #2129xx	Mint-	E390
90mm f2.8 Summicron-M Silver #3704xx (boxed)	As new	E750
9cm f4 Elmar (Collapsible) Chrome #1492xx	User	E190
135mm f4 Tele-Elmar	Exc+	E250
135mm f4.5 Hektor #1583xx	Mint-	E230
Leica R6 Chrome	Mint-	E490
Leica SL2 Black	Exc+	E390
28mm f2.8 Elmarit-R 3 CAM #3229xx	Sold	Mint-
35mm f2.8 Summicron-R ROM #3843xx	Sold	Exc++
35mm f2.8 Elmarit-R ROM #3333xx	Exc++	E290
Angenieux 35-70mm f2.5-3.3 Zoom with hood;	As new	E50
pouch & ultra slim filter in presentation box	Mint-	E650
Voigtlander Bessa-R4A	Nr. mint	E490
21mm f4 Color-Skopar + Vfinder Silver (boxed)	Mint	E270
25mm f4 Color-Skopar VM	Mint-	E250
35mm f2.5 Color-Skopar MC with M-Mount Ring	Mint	E240
50mm f1.5 Ultron + hood Silver (boxed)	Mint	E320

## Other Medium / Large Format

Bronica RF645 + 65mm	Mint-	E670
Bronica 45mm f4 & Vfinder for RF645	Mint-	E290
Contax 140mm f2.8 Sonnar T <sup>TM</sup> (boxed) for 645	Mint	E790
Fuj GW690 II (65mm) Counter-62	Exc++	E690
Fuji G617 with 105mm f8 Vfinder & Center Filter	Exc++	E1590
Mamiya 6 + 75mm f3.5 + hood	Mint-	E850
Mamiya 7 + 65mm f4L + Hood	Mint-	E1190
Mamiya 7 + 80mm f4L + Hood	Exc+	E890
Mamiya 7II + 80mm f4L + Hood (boxed)	Mint-	E1290
Mamiya 50mm f4G for Mamiya 6	Sold	Exc+
Mamiya 50mm f4.5L + hood & Vfinder (boxed)	Mint	E850
Mamiya 65mm f4L	Sold	Exc+
Mamiya 150mm f4.5L + hood (boxed) Brand NEW	NEW	E850
Pentax 165mm f4 SMC Leaf Shutter Latest	Mint	E320
Rolleiflex 2.8F (80mm Planar)	Sold	Exc++
Tele-Rolleiflex (135mm f4 Sonnar)	Exc+	E1190
Schneider 150mm f3.5 PQ Sonnar HFT (6000)	Sold	E450
Schneider 180mm f2.8 PQ Tele-Xanar HFT	Mint	E990
Rodenstock 65mm f4.5 Grandagon-N MC with		
Centre Filter	Sold	Exc++
Fuji 90mm f8 Fujinon-SW	Mint	E390
Schneider 120mm f5.6 Makro-Symmar HM	Mint	E650

## Pre-owned Leica

Epson R-D1 + Charger, instructions & spare batt	Mint-	E890
Leica M7 0.72 Black	Exc+	E1350
Leica M7 0.85 Black	Exc++	E1450
Leica M6 Black #1691xx Early Wetzlar	Exc+	E850
Leica M6 Black #1761xx	Exc+	E850
Leica M6 Black #2414xx	Exc++	E890
Leica M4-P Chrome 1:2500 (70yr Anniversary)	Exc+++	E990
Leica M4-P #1551xx	User	E490
Leica M4 #1184xx	Sold	Exc+++
Leica M4 #1207xx Black Paint	Sold	Exc++
Leica M4-2 #1468xx	Exc+++	E690
Leica M3 #758xx D/W	Exc+++	E790
Leica M3 #912xx S/W	Exc	E550
Leica M3 #1047xx S/W	Exc++	E650
Leica MD	Exc++	E390
Leica MD-2	User	E290
Leica Motor M (boxed)	Mint-	E270
Leica Illog #878xx	Sold	Exc+
Leica Illog #892xx	Exc+++	E890
16-18-21mm f4 Tri-Elmar-M + Vfinder & UV/IR		





Supplementary close-up lenses come in a range of different strengths. It is worth paying for high-quality optics



## Geoffrey Crawley explains... Macro Photography

IN PART TWO OF HIS ARTICLE ON MACRO PHOTOGRAPHY, **GEOFFREY CRAWLEY** LOOKS AT EQUIPMENT FOR CLOSE-UP WORK

**I**N part one of this article (AP 8 August), I looked at close-up photography in general. The focus was on the macro zoom, which is often the beginner's first encounter with the word 'macro' – a term that really means imaging the subject on film or a digital sensor at a size larger than life. However, the word macro has become attached to any lens that is able to focus closer than would normally be expected for its focal length. The longer the focal length, the further away its minimum focus distance will be. If you look at the specification data of a lens, there will be a listing for its closest focusing distance. This is measured not from the front of the lens, but rather from the film or sensor plane. If this is not marked, and unless you are into accurate technical work, it is safe to take this measurement from the back of the camera.

The advantage of a long focal length, such as 90–105mm for a full-frame camera and 60–70mm for an APS-C-format model, is that

the working distance between the front of the lens and the subject is also long. That means that in nature photography there is less chance of scaring a live subject away. Indoors, there is more room to arrange lighting in a set-up. Furthermore, a long focal length lens has shallow depth of field, which helps isolate the subject from the background. The three-dimensional effect this can produce is an important technique among those needed for creative close-ups.

### Moving on

Naturally, the scope of a lens is widened when a close-focusing or 'macro' monofocal – a lens of fixed focal length – is used. For full-frame cameras (135 film or digital), a 50mm lens is regarded as standard. A 'macro' version costs more, but most can be focused to 1:1 (life size). For 35mm and full-frame digital SLRs, the minimum focusing distance for a 50mm standard lens is about 45cm (18in). A 50mm, 1:1 focusing

version comes in to about 18cm (7.5in) from the subject.

What is sometimes seen as a barrier to buying a standard focal length macro lens is the idea that it is inferior to a normal one in distance work (out to infinity). However, this is not the case. Performance will be at least as good, and quite often it will be better. This is partly because the maximum aperture will be  $f/2.8$ – $3.5$ , which is smaller than the  $f/1.8$  or  $f/2$  of a normal standard lens. Provided the work does not need a faster aperture of  $f/1.4$ – $2$ , trading up to a macro optic should be a good move.

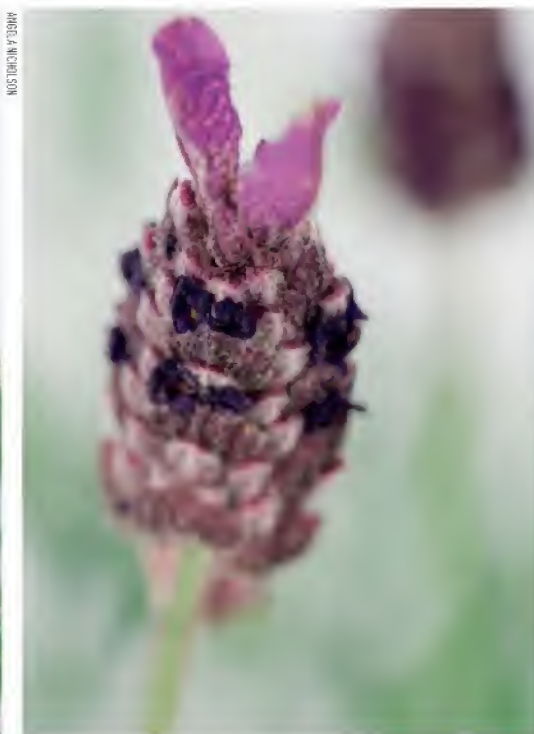
At about 18cm, the working distance between the front of the lens and the subject is not great with a 50mm macro lens. It is even less when a standard macro lens is fitted to an APS-C-format camera, whose standard focal length is about 27mm. This is why for APS-C-format cameras a macro lens should be around 60mm, which is the equivalent of 90mm focal length on a full-frame

model. The alternative to substituting a close-focusing standard monofocal lens for a 1:1 focusing version is to buy a macro lens of longer focal length, which gives the advantages of the greater working distances discussed earlier. Photographers owning a medium-span zoom lens as the standard fitting rather than a monofocal optic should also consider opting for a longer focus macro lens.

For general use, a focal length in the aforementioned range – 90–105mm for 35mm film or full-frame digital SLR cameras, or 60–70mm for APS-C-format models – is advised. Obviously, for the latter a 60 or 70mm lens will not give as helpful a working distance as a 90 or 105mm optic on full frame. However, it will nevertheless be an improvement on the standard 27–35mm focal length lens. A 105mm full-frame macro lens pressed into occasional service on an APS-C-format model gives a 160mm equivalent, but the viewing angle will be too narrow for many close-up purposes. There are 200mm, full-frame, close-working macro lenses, such as Nikon's Micro Nikkors, but they are for specialised applications such as medical work and long-range nature photography.

A lower-cost alternative to upgrading to a macro monofocal optic is to use a supplementary lens attached to the front filter screw of a normal lens. The lens maker's specially computed supplementary optics work very well. There are even lower-cost alternatives, although these may need the prime lens stopping well down to give cross-frame definition and quality, as they usually introduce spherical aberration.





Above: These two images were taken at the closest focusing point of a 24-70mm zoom lens (at 70mm) with and without a bank of three 3+ dioptre lenses. The focusing point was much closer with the +9 dioptre, making the flower at the front of the scene significantly larger in the frame. Also, there is less depth of field in the image taken with the supplementary lenses. Both shots were taken at f/8

Right: The AF DC-Nikkor 105mm f/2D has a minimum focusing distance of 90cm. At this distance the subject is 7.7x smaller in the frame than it is in real life. Attaching a 3x dioptre lens reduces the focusing distance to 40cm and increases the magnification to 1:2.5. Increasing the strength of the dioptre lens to +7 brings the coin close to life size. The largest coin shown was captured using the Sigma 105mm f/2.8 at its closest focusing point (31cm), which gives 1:1 magnification



## The science

LOOKING down the lists of lenses from the world's optical manufacturers, there are always a few of fixed focal length (monofocal) that are labelled 'macro'. These are available from the camera manufacturers in their own-brand SLR and DSLR fittings, and from the independents in a variety of fittings. Usually, they will focus in close to a 1:1 repro scale. This lens type will, again usually, have a repro scale that discloses its current value as the focusing section extends. Internal focusing makes macro lens design more difficult, owing to the much longer focusing movement necessary, but when present it has the advantage that the distance between the front of the lens and the subject does not change during focusing.

The distance between subject and camera is particularly important in nature photography, where the ability to acquire a large image without alerting

a live subject is valuable. The stand-off between the front rim of the lens and the subject in close-up work is termed the 'working distance'. The distance between the camera and the subject plane – the subject distance – is always measured from the plane of the film or sensor in the camera. It is usually marked by a symbol on the top-plate of a film SLR, but less frequently so on a DSLR. Its precise plane can be of importance, though, when deriving data in some scientific and technical applications. Another field in which a long working distance may be of importance is medical photography.

### One for all

A close-focusing monofocal lens is likely to be as expensive as a medium-price-range standard zoom. So the frequently asked question is: will I be buying a lens that is only useful for the occasional special subject, and not for general use? The answer is that the high order of

correction required for a lens expected to produce accurate imaging at close quarters maintains performance at a high level for subjects out to infinity. For example, in distance work a 'macro' design will usually at least equal the results of a standard 50mm lens. The downside is that the aperture may be lower (f/2.8-3.5 rather than f/1.8-2) but since many photographers are now happy with f/3.5-4 zooms, the earlier objections may have gone. Another criticism is that with the long subject distance range, automatic focusing is slowed up – particularly the initial search. This has been overcome by providing a range limiter that can be switched between the close-up sector and the more normal one out to infinity.

### Close-up lenses

Bellows, extension tubes and supplementary lenses are all alternative options for close-up work. A supplementary lens is fitted in

front of the prime lens, whether it is a monofocal or a zoom. Its function is to relay the rays coming from the close-in subject in such a way that the prime lens 'sees' them as coming from further off and so within its own normal focus range. For example, with the prime lens set to infinity, a one dioptre supplementary optic will give sharp focus at one metre, a 0.5 dioptre supplementary at 0.5m, and so on. Focal lengths in dioptres only really relate to single element thin lenses, such as those in spectacles for which it is the standard rating. A useful rear-of-lens-fitting supplementary was one giving a variable repro scale. I know only of two: one was from Panagor, and is now a cult item in internet circles; the other was from the old UK firm AICO. These occasionally appear second-hand. The more complex multi-element supplementaries computed by optical firms for their own lenses are far





JAMES A. ANDERSON



RICHARD SIBLEY

A coupling ring allows a lens to be attached (via its filter thread) onto the filter thread of a lens that is mounted conventionally on a camera. This means that the second lens is reversed and the whole arrangement is turned into a multi-element macro lens. The maximum magnification is equivalent to the ratio of the lenses. For example, with a 200mm lens on the camera and a reverse-mounted 50mm optic, there is a magnification factor of 4:1, making subjects appear 4x life size in the frame

A reversing ring has a lens mount on one side and a filter thread on the other. It therefore allows a lens to be mounted in the reverse position on the camera so that it can be used as a macro optic. The downside is that the lens has a fixed working distance, but high magnification is possible



The Tamron 90mm f/2.5 focuses to 1:2, but with a 2x teleconverter attached it becomes a 180mm optic focusing to 1:1

superior to the simple dioptric ones. They fully maintain the corrections of the prime lens, though there can be minimal contrast loss.

### Extension tubes

The extension tube or tube set was once part of every photographer's kit. The close-up devotees prefer extension bellows with their continuously variable repro scale, as tubes give only a fixed set of scales. The principle is simple: the further a lens moves from the image plane, the closer it focuses. This is true of any lens, though zooms introduce complications. The problem is that most lenses are corrected for infinity focus. If used on extension tubes or bellows, corrections will fall off.

### Other methods

A solution to the problem of correction fall-off with extension devices is to reverse the lens. In

normal use the distance from subject to lens is much greater than that from lens to camera image plane. In close-up work it can be the opposite, where the distance from lens to image plane may be even greater than from subject to lens. By reversing the lens so that the front glass is pointing at the image plane, a condition closer to that for which the lens was designed is restored. Reversing rings to fit a lens screw-in filter fitting are available from SRB-Gritum (visit [www.srb-gritum.com](http://www.srb-gritum.com) or call 01582 661 878). A downside of using this is not a great problem. Fully electronically linked extension devices are expensive, although the old problems of exposure calculation with lens extensions have been

eased by through-the-lens metering.

A further option is to use a teleconverter. The function of a teleconverter is to increase the focal length of the lens, usually by a factor of 1.5x, 2x or 3x. It does this while maintaining the original distance scale of the prime lens, magnifying, as it were, the centre of its image circle. It follows, therefore, that at the minimum focal distance of the prime lens the subject will be imaged at 1.5x, 2x or 3x the prime lens size. The distance between lens and subject remains the same, but the visual effect is of having moved closer. However, as well as magnifying the subject, the teleconverter also magnifies any lens aberrations along with it – notably colour errors, which cannot be reduced by stopping down. By using teleconverters specially computed by lens and camera manufacturers for their products, this can be avoided, but since they

provide them mainly for long focus and tele lenses – and sometimes long tele zooms – the minimum focus distance may not really qualify for close-up work.

### The limits

'Macro' photography is only the beginning. It is possible to go further than the areas that we have been exploring. It is easy to attach a camera to a microscope: an expensive one is not essential. This opens up fascinating domains of high magnification, limited only by imagination. An inexpensive start can be made with a standalone USB connective device, such as the Veho range, giving up to 200x magnification. Beyond the optical micro range lies the imagery possible with electron microscopy and then stereo electron microscopy. Some of the most awesome of images have been obtained with this very advanced 'macro' photography. **AP**



# Ricoh GR Digital III

Ricoh's latest luxury digital compact camera features a range of innovative new features. **Barney Britton** tests the new **GR Digital III**



## At a glance

- 10-million-pixel CMOS sensor
- ISO 64-1600 (equivalent)
- 920,000-dot LCD screen
- DR (dynamic range) expansion mode
- 28mm (equivalent) f/1.9 lens
- Street price £529.99

**T**HE Ricoh GR Digital III is the latest in Ricoh's series of flagship digital compact cameras, after the GR Digital and GR Digital II (tested in AP 9 February 2008). The philosophy behind the GR-series cameras has remained more or less the same since the first one was released, and the latest GR Digital is built around the same principles.

Like its forebears, the GR Digital III offers a fast, high-quality fixed lens (28mm equivalent), full manual control and exemplary build quality. However, Ricoh hasn't rested on its laurels, and accordingly, the GR Digital III comes equipped with a lot of new functionality, some of which is inherited from the innovative CX1 and shared with the recently announced CX2. These new features include a 920,000-dot LCD screen, an electronic spirit level in both landscape and portrait formats, and multi-point white balance. The GR Digital III also features the interesting DR dynamic range mode first seen in the CX1. In DR mode, the camera takes two images in quick succession, at different exposure values. They are then combined to create a single image with an extended dynamic range.

## Build and handling

The GR Digital III is a well-built camera. Its textured black body is solid and reassuringly heavy, and a large wrap-around rubber handgrip ensures a firm hold, even with sweaty palms. Like its predecessors, the GR Digital III offers full manual control over exposure, and a tiny control input wheel above the handgrip serves to change aperture and/or shutter values in  $\frac{1}{3}$ EV stops. The exposure mode is set using a standard PASM dial on the top-plate, but unusually, this dial is lockable. This takes some getting used to, but I soon found that depressing the tiny locking

button before moving the dial quickly becomes second nature, and it has the benefit of preventing the camera from shifting out of my favoured shooting modes by accident.

The GR Digital III's LCD screen is the same 920,000-dot unit that Ricoh launched in the CX1, and the extra resolution over most competitive models makes image composition and review very straightforward. However, it lacks an effective anti-reflection coating, so it is very hard to see in bright light. In fact, outdoors on a sunny day, the screen's excellent resolution and high refresh rate is wasted. Fortunately, Ricoh produces two accessory viewfinders, the GV-1 and GV-2, the latter of which has brightlines to cover the optional wideangle converter that converts the GR Digital III's lens to a 21mm (equivalent).

In virtually all other respects, the GR Digital III handles superbly. Features like the on-screen virtual horizon are great to see in a camera of this type and add real value to the user experience. Another feature that I've grown to appreciate during my time with the camera is the flexible AF/AE point. With this feature activated, the

AF and/or exposure can be locked from a specific area of the scene, using a roaming target point. The system works well, although the logical next step for this function is integration with a touch-sensitive LCD screen.

## Performance

The Ricoh GR Digital III's predecessors were praised for their solid, luxurious handling and excellent image quality, but rightly criticised for being rather slow. Shooting in raw mode could be a frustrating experience with both the GR Digital and GR Digital II, but not so with the GR Digital III. It goes about its business quickly, and everything, from AF to image review, is fast and responsive. There is still a short delay after capturing a raw file and the image appearing on the LCD screen, but it is little more than a moment, compared to the several seconds in previous generations of the GR series.

However, while image review is

very prompt, the image shown in playback doesn't match the screen's high resolution. This is a fairly common problem with digital cameras, but in the GR Digital III the modest 4x zoom setting is the last point where detail resolution in the preview image matches the screen resolution. If you zoom in further, the preview image steadily degrades into an unsharp mush. A firmware update to allow the camera to capture a higher resolution preview alongside the full-size JPEG would solve the problem, albeit perhaps with some penalty in processing and display speed.

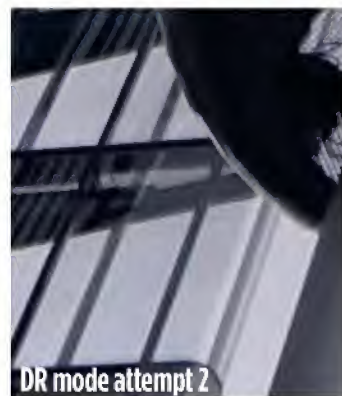
## Image quality

Images from the GR Digital III look great. At the camera's 'base' ISO setting of 64, noise is nonexistent, and both JPEGs and DNG raw files have clarity and detail that are impressive in a digital compact camera. The fixed 28mm lens is a fine performer,

☞ Like its forebears, the Ricoh GR Digital III offers a fast, high-quality fixed lens, full manual control and exemplary build quality ☞



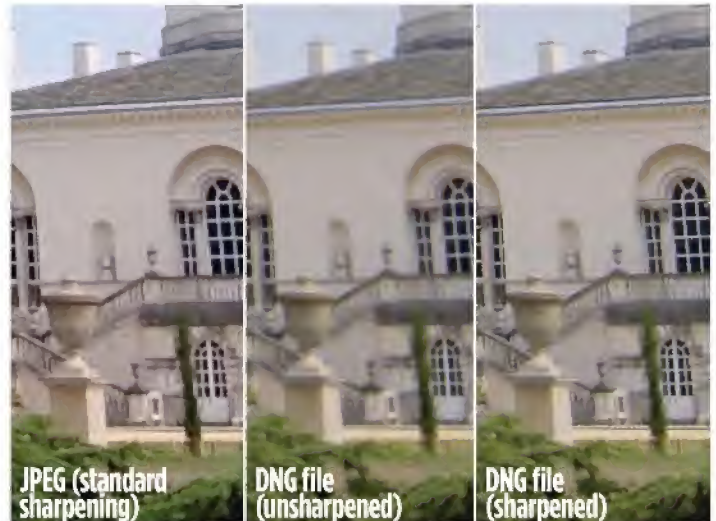
Ricoh's DR mode works by combining two exposures, one darker than the other. My first attempt at this shot shows the strange 'ghost' effect described in the 'Image Quality' section, while my second try was more successful







A lot of detail can be drawn out of the Ricoh GR Digital III's DNG files. To sharpen the raw image shown here, I opened it in Photoshop and converted the image to Lab Colour, then sharpened the luminance layer using USM settings of Amount 300%, Radius 0.4 and Threshold 3, and converted the image back to RGB



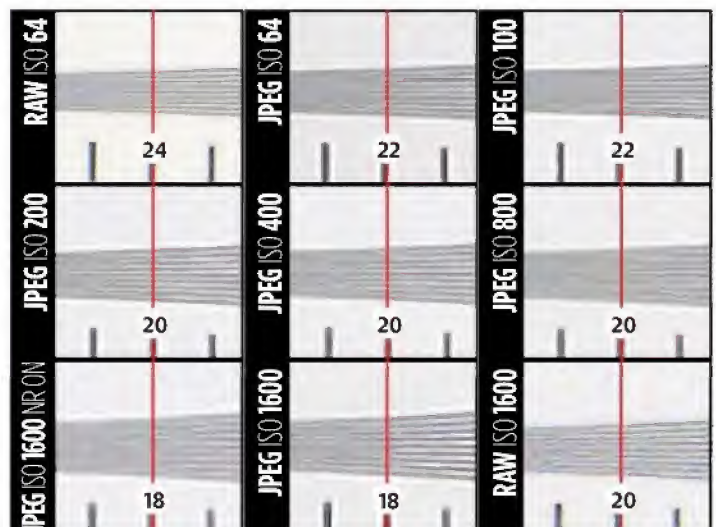
and out of the hundreds of pictures I have taken with the GR Digital III, none is marred by excessive fringing or distortion. At higher ISO settings the ten-million-pixel sensor begins to show its limitations, and although usable images can just about be obtained at ISO 800, the ISO 1600 setting should be reserved for emergency use only. While high-contrast detail is rendered remarkably well, banding is a problem at this setting. This banding takes a curious form, and resembles the effect of a blocked printer head on an inkjet print.

The GR Digital III's multi-point white balance system is very effective, and after repeated comparison tests I can discern little difference between colour rendition from the multi-point system and the camera's WB presets in natural light. In these conditions, the multi-point WB system is all but infallible.

The Ricoh GR Digital III's lens is fixed at 28mm, which will no doubt

give some potential purchasers pause for thought, although I didn't find it limiting during my time with the camera. It is worth noting that despite the wide angle of view, the unusually fast lens aperture of  $f/1.9$  does allow some control over depth of field. However, to get a decent out-of-focus background effect it is necessary to get fairly close to the subject and shoot wide open.

The DR mode of the GR Digital III operates in the same way as it does in the CX1, and has the same benefits – and the same disadvantages. In good light, with a static subject, the system works well, and recovers a lot of detail from highlight areas that would otherwise have been clipped. In poor light, where the shutter speeds start getting long, or with moving subjects, the delay between the two images being captured leads to a misalignment that causes a 'ghosting' effect that renders the images unusable. **AP**



The Ricoh GR Digital III is capable of very high detail resolution, as can be seen from these enlargements. Even at its maximum ISO setting of 1600, the high-contrast detail in our test chart is impressively well defined. In 'real-world' shooting, however, resolution drops off in low-contrast, low-light environments

## Data file

Ricoh UK Ltd, Ricoh House, 1 Plane Tree Crescent,  
Feltham, Greater London TW13 7HG  
Tel: 0208 261 4000. Website: [www.ricoh.co.uk](http://www.ricoh.co.uk)

RRP	£529.99
Sensor	10 million effective pixels
Output size	3648x2736 pixels
Lens	28mm (equivalent) $f/1.9$
ISO	ISO 64-1600
Exposure modes	PASM, auto, plus MY1, MY2 and MY3 custom modes, and 4 scene modes, including DR and Movie
Exposure metering	256 multi-zone, centreweighted, spot
White balance	Auto, multi-pattern auto, 5 presets, plus manual and WB bracketing
LCD	3in LCD with 920,000 dots
AF modes	Multi-AF, spot AF, multi-target AF, manual, fixed focus (infinity)
Memory card	Secure Digital/MMC
Power	Rechargeable Lithium-Ion
Weight	188g
Dimensions	107x25x58mm

## Our verdict

LIKE the Ricoh GR Digital III a lot. It takes the best bits of its predecessors, and adds some significant new features that make it easier and faster to use. The quality of the 28mm equivalent lens is excellent, and although Ricoh's menu system is rather dense, the amount of functionality accessed via the 'hard points' means that I spent little time buried in it.

A fixed lens and a relatively low pixel count might be considered a brave move in a consumer-orientated camera, but the quality of the images speaks for itself, and yet again, I find myself giving thanks to Ricoh for supporting the (almost) universal Adobe DNG raw format rather than a proprietary format of its own.

As far as the competition is concerned, the GR Digital III is up against the likes of the Panasonic Lumix DMC-LX3 (tested in AP 20 September 2008) and the as yet untested Canon PowerShot S90. The LX3 offers a slightly more refined interface and a modest zoom range, but the GR Digital III offers a more compelling all-round feature set. Like Panasonic with the LX3, Ricoh has designed the GR Digital III to appeal to a discerning market. It won't suit everyone, but it isn't intended to, and its relatively high cost reflects the fact that this is an unashamedly niche product. Fortunately, Ricoh has filled that niche very well.





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[illegible]

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## Nikon Manual

[illegible]

## Olympus Manual

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# Roger Hicks

## IN PHOTOGRAPHY, THE MORE YOU SPEND, THE LESS YOU GET



**ROGER HICKS** is a much-published author on photography. He has written more than three dozen books on the subject, many in partnership with his wife, Frances Schultz. Roger started photography as a teenager in the 1960s and worked professionally in a London advertising studio in the mid-1970s. He has been a freelance photographer/writer since 1981, contributing to many photography magazines, including 'Shutterbug' in America. Visit his website at [www.rogerandfrances.com](http://www.rogerandfrances.com).

**B**UY a tripod for £30 or £40, and you get all the bells and whistles thrown in: geared centre column, built-in head, quite probably a quick-release plate. Pay five times as much, and normally, all you get is the bare legs. Likewise, buy a mid-range DSLR and you get an extraordinary number of 'modes': shutter priority, aperture priority, full-auto, action, landscape, low-light, portrait, maybe more. Buy an Alpa at ten times the price and you don't even get an interlock between the film transport and the shutter.

In other words, the more you pay, the less you get. This is rather curious. The easy explanation is that you are paying for quality, and for limited-production exclusivity. This is not, however, the whole story.

To begin with, there is the 'turn-key' aspect. If you don't know much about tripods, or photography, you want something that promises to do all you want, without further ado or effort on your part. Perhaps later you'll learn the relative merits of ball-and-socket heads, three-way heads, pan-and-tilt heads and such exotica as the NPC Pro Head. Maybe, too, you'll learn about shutter speeds and apertures, and how to achieve the effects you want by choosing them yourself, rather than leaving it to the camera. It's all a defensible viewpoint.

I can't help suspecting, though, that it goes even deeper than this. Straight to the heart, in fact, of consumer capitalism.

There is no doubt that capitalism works. It has led to a higher standard of living, faster, for more people, than any other economic system. What is less clear is how long, and to what extent, the current model of consumer capitalism can last. It is increasingly clear that pure financial capitalism doesn't work. As long as capitalism sticks to material goods, it is (or can be) clever stuff. As soon as it starts trying to develop a theory of money – in other words, when it starts dealing with financial 'products' instead of material goods – it becomes too much of a temptation for con men, crooks or those who simply think they are cleverer than they are.

Consumer capitalism relies on rapid consumption, and on people buying things they don't really need; in many cases, things that they don't even particularly want. It is the culture of the child who sees a shiny bauble and immediately wants it. In the days of film cameras, many dealers admitted that a large part of their turnover, and profit, came from people who bought the 'wrong' camera and then traded it in for another one, anything from a few months to a year or two later. As well as the profit on the new camera, there was the profit on the second-hand one, too.

Nowadays, digital cameras pour forth in bewildering numbers, and only the best of them have any residual value after they are more than a few months old. The

second-hand market is not, therefore, what it was. In order to make any profit, the camera shop owner would have to make such a low offer that most people would say, 'Forget it – I'll keep it as a spare.'

This in turn leads to an almost endless accumulation of stuff, not just digital cameras. I define stuff in this context as 'things that are too good to throw away, but not really very much use because they've been replaced by something better, and don't even have sentimental value.'

Most people are (quite reasonably) disinclined just to throw such stuff away because, after all, it was useful once, and will be useful again if its replacement fails in some way, usually at the least convenient time to replace it.

The trouble is that 'superseded' is all too often shorthand for 'replaced by something with more bells, whistles and gewgaws, which were added by the unscrupulous in order to sell more stuff to the hard of thinking'. This is the point at which consumer capitalism starts to look as if it is stretched a bit too thin. We buy cheap, flashy tat with a short lifespan on a whim because we can. Or to put it another way, we buy what we don't need when others are in want. Regardless of our own consciences, or of how hard we are willing to examine our motives, there is a limit to how long the have-nots will put up with this sort of behaviour. **AP**

There is no doubt that capitalism works. It has led to a higher standard of living, for more people, than any other economic system

### Editorial

Amateur Photographer, IPC Media, Blue Fin Building, 110 Southwark Street, London SE1 0SU  
Telephone 0203 148 4138 Fax 0203 148 8130  
Email [amateurphotographer@ipcmedia.com](mailto:amateurphotographer@ipcmedia.com)

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Amateur Photographer, IPC Media, Blue Fin Building, 110 Southwark Street, London SE1 0SU. Telephone: 0203 148 2517  
Email [lee\\_morris@ipcmedia.com](mailto:lee_morris@ipcmedia.com)  
Classified telephone 0203 148 2929. Fax: 0203 148 8158  
Display telephone 0203 148 2517. Fax: 0203 148 8158  
Inserts call Innovator on 0203 148 3710

### Editorial team

Editor	Damien Demolder
Editor's PA	Christine Lay
Art Editor	Mark Jacobs
Production Editor	Lesley Upton
Technical Editor	Angela Nicholson
News Editor	Chris Cheesman
Deputy Production Editor	Breandan Maguire
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Technical Writer	Richard Sibley
Features Writer	Gemma Padley
Sub Editor	Oliver Cotton
Photo-Science Consultant	Geoffrey Crawley
Studio Manager	Alan McFaden

### Special thanks to

Rosie Barratt (picture returns) 0203 148 4121

Email [appicturedesk@ipcmedia.com](mailto:appicturedesk@ipcmedia.com)

The moderators of the AP website Andrew Robertson, Chris Cool, David J White, Fenris Oswin, Henry Rogers, Isadab, Nick Roberts, Richard Hardwick, The FatController

### Advertising team

Group Advertisement Manager	Lee Morris	0203 148 2517
Senior Display Sales Exec	Julia Spencer	0203 148 2637
Senior Display Sales Exec	Simon Gerard	0203 148 2510
Display Sales Executive	Rob Selvey	01922 412 720
Business Development Manager	Dave Stone	0203 148 2516
Classified Team Leader	Ben Turpitt	0203 148 2555
Classified Sales Executive	Fola Egbewole	0203 148 2929
Display Ad Production	John Jones	0203 148 2671

### Marketing and promotions

Senior Marketing Manager	Estelle Hicks-Bennett	0203 148 4321
Online Manager	Karen Sheard	0203 148 4943
SPI Administrator	Charlene Baker	0203 148 4326

### Publishing team

Advertisement Director	Chris Templeman
Group Magazines Editor	Garry Coward-Williams
Publishing Director	Alex Robb <a href="mailto:alex_robb@ipcmedia.com">alex_robb@ipcmedia.com</a>
Managing Director	Paul Williams

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